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COMPUTIST

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Reviews

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Readers Data EXchange

New COMPUTIST readers using Apple IIs are advised to read this page carefully to avoid frustration when attempting to follow a softkey or entering the programs printed in this issue.

What is a softkey, anyway?

Softkey is a term which we coined to describe a procedure that removes, or at least circumvents, any copy-protection on a particular disk. Once a softkey procedure has been performed, the resulting backup copy can usually be copied by the normal copy programs (for example: COPYA, on the DOS 3.3 System Master disk).

Commands and control keys

Commands which a reader is required to perform are set apart by being in boldface and on a separate line. The return key must be pressed at the end of every such command unless otherwise specified. Control characters are preceded by "ctrl". An example of both is:

6 ctrl P

Type 6. Next, place one finger on the ctrl key and then press P. Don't forget to press the return

Other special combination keypresses include ctrl reset and open-apple ctrl reset. In the former, press and hold down the ctrl key then press the reset key. In the latter, press and hold down both ctrl and open-apple then press reset.

Software recommendations

The Starter Kit contains most of the programs that you need to "Get started". In addition, we recommend that you acquire the following:

· Applesoft program editor such as "Global Program Line Editor (GPLE)".

Assembler such as "Merlin/Big Mac".

•Bit-copy program such as "Copy II Plus", "Locksmith" or "Essential Data Duplicator".

•Word-processor (such as AppleWorks). •"COPYA", "FID" and "MUFFIN" from the DOS 3.3 System Master disk.

Super IOB and Controllers

This powerful deprotection utility (in the COMPUTIST Starter Kit) and its various Controllers are used in many softkeys. (It is also on each Super IOB Collection disk.)

Reset into the Monitor

Softkeys occasionally require the user to stop the execution of a copy-protected program and directly enter the Apple's system monitor. Check the following list to see what hardware you will need to obtain this ability.

Laser 128: Your ROM includes a forced jump to the monitor. Press ctrl return reset.

Apple II+, //e, compatibles: 1) Place an Integer BASIC ROM card in one of the Apple slots. 2) Use a non-maskable interrupt (NMI) card such as Replay or Wildcard.

Apple II+, compatibles: 1) Install an F8 ROM with a modified reset-vector on the computer's motherboard as detailed in the "Modified ROM's" article (COMPUTIST #6 or Book Of Softkevs III) or the "Dual ROM's" article (COM-PUTIST #19).

Apple //e, //c: Install a modified CD ROM on the computer's motherboard that changes the open-apple ctrl reset vector to point to the monitor. (This will void an Apple //c warranty since you must open the case to install it.)

Apple //gs: If you have the 2.x ROM, there is a hidden Classic Desk Accessory (CDA) that allows you to enter the monitor. In order to install the new CDA, you should enter the monitor (CALL -151) before running any protected programs and press # return . This will turn on two hidden CDAs, Memory Peeker and Visit Monitor. Thereafter press openapple ctrl esc to go to the Desk Accessories menu. Select Visit Monitor and there you are. Use ctrl Y to exit.

Recommended literature

•Apple II Reference Manual (or IIe, IIc, etc.) •DOS 3.3 & ProDOS manual

•Beneath Apple DOS & Beneath Apple Pro-DOS, by Don Worth and Pieter Lechner, from Quality Software

Typing Applesoft programs

BASIC programs are printed in a format that is designed to minimize errors for readers who key in these programs. If you type:

10HOME: REMCLEAR SCREEN

The LIST will look like:

HOME : REM CLEAR SCREEN

Applesoft inserts spaces into a program listing before and after every command word or mathematical operator. These spaces don't pose a problem except when they are inside of quotes or after a DATA command. There are two types of spaces: those that have to be keyed and those that don't. Spaces that must be typed appear in COMPUTIST as special characters (◊). All other spaces are there for easier reading.

NOTE: If you want your checksums to match, only type spaces within quotes or after DATA statements if they are shown as (0) charactors. SAVE the program at periodic intervals using the name given in the article. All characters after a REM are not checked by the checksum program so typing them is optional.

Typing Hexdumps

Machine language programs are printed in COMPUTIST as hexdumps, sometimes also as source code.

Hexdumps are the shortest and easiest format to type in. You must first enter the monitor: **CALL -151**

Key in the hexdump exactly as it appears in the magazine, ignoring the four-digit checksum (\$ and four digits) at the end of each line. When finished, return to BASIC with:

3D0G

BSAVE the program with the filename, address and length parameters given in the article.

Typing Source Code

The source code is printed to help explain a program's operation. To enter it, you need an "Assembler". Most of the source code in older issues is in S-C Assembler format. If you use a different assembler, you will have to translate portions of the source code into something your assembler will understand.

Computing checksums

Checksums are 4-digit hexadecimal numbers which tell if you typed a program correctly and help you locate any errors. There are two types of checksums; one created by the CHECKBIN program (for machine language programs) and the other created by the CHECKSOFT program (for BASIC programs). Both are on the "Starter Kit".

If your checksums do not match the published checksums then the line where the first checksum differs is incorrect.

CHECKSOFT instructions: Install Checksoft (BRUN CHECKSOFT) then LOAD your program. Press & to get the checksums. Correct the program line where the checksums first dif-

CHECKBIN instructions: Enter the monitor (CALL-151), install Checkbin at some out of the way place (BRUN CHECKBIN, A\$6000), and then LOAD your program. Get the checksums by typing the Starting address, a period and the Ending address of the file followed by a ctrl Y. SSSS.EEEE ctrl Y

Correct the lines where the checksums differ.

Writing to the RDEX editor

RDEX (are-decks) stands for: Reader's Data EXchange. We print what you write. When you send in articles, softkeys, APTs, etc., you are submitting them for free publication in this magazine. RDEX does not purchase submissions nor do we verify data submitted by readers. If you discover any errors, please let us know so that we may inform our other readers.

Remember that your letters or parts of them may be used in RDEX even if not addressed to the RDEX editor. Correspondence that gets published may be edited for clarity, grammar and space requirements.

Because of the great number of letters we receive and the ephemeral and unpredictable appearance of our volunteer staff, any response to your queries will appear only in RDEX, so it would be more appropriate for you to present technical questions to the readers and ask for their responses which will then be placed in the Apple-RDEX.

How to get a free library disk

Whenever possible, send everything on Apple format (5.25" - DOS/ProDOS or 3.5" - Pro-DOS) or IBM format (3.5") disks. Other formats are acceptable but there may be some delay as we look for someone to translate it for us. (If you use a 5.25" disk, when we print your letter, we will return your disk with the current library disk copied onto it.) Use whatever text editor you like, but tell us which one. Put a label on the disk with your name (or pseudonym) and address (if you want to receive mail). Don't reformat any programs or include them in the text of your letter. Send Applesoft programs as normal Applesoft files and machine language programs as normal binary files. We have programs to convert them to the proper format for printing. If you are

sending source code files, and you are not using the S-C Assembler, send them as normal text

When to include a printed letter

Don't include hardcopy (printout) unless:

- a. You are writing about a bug or other printing
- b. You are writing to ask for help.
- c. You are answering another readers help re-
- d. You are writing about your subscription or sending an order for back issues or software.

Bugs, requests for help and answers to requests for help are bumped to the head of the line and go in the very next issue. All other letters are printed in the order that we receive them.

Writing to get help

When writing to request help, be sure to include ALL relevent information. The more information you include, the easier it is to find a solution. There's an old saying that goes "A properly framed question includes 90% of the answer".

How to get mail

If you are interested in receiving mail from other readers, be sure that we have a current address. If you use a pen name and want to receive mail, we need to have your address. Our readers privacy is important, so we will not print your address unless you specifically say too.

How to write to RDEX authors

When writing to one of the RDEX authors. Write your letter and seal it in an envelope. Put your return address, the authors name (as it appears in RDEX) and the correct postage on the envelope. Put this envelope into another and send it to RDEX. We will put the correct address on your letter and mail it for you. Check to the right of the authors name to see if the author is writing from a foreign country and include the proper postage.

Help Line

These readers have volunteered their time to help you. Please call only within the given time frames (corrected for your time zone). No collect calls. (You can write anytime!)

Jack Nissel (Disk Protection, 7-10PM EST) (215) 365-8160

Marc Batchelor, 6025 Coker St., Cocoa, FL

Rich Etarip, 824 William Charles Ct. #2, Green Bay, WI 54304-4018

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(Bulletin Board System)

Vince Andrews is the sysop for the Computist BBS. The NEW number is:

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If you already have a User ID# and password, sign-on using the User ID#. If you are a new user, it may take a day or so to validate your new ID# and password.

You have a LEGAL RIGHT to an unlocked backup copy of your commercial software.

Our editorial policy is that we do NOT condone software piracy, but we do believe that users are entitled to backup commercial disks they have purchased. In addition to the security of a backup disk, the removal of copy-protection gives the user the option of modifying programs to meet his or her needs. Furthermore, the copyright laws guarantee your right to such a DEPROTECTED backup copy:

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United States Code title 17, §117

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The PRODUCT MONITOR

RATINGS

Superb ****

Excellent ***

Very Good **

Good **

Fair *

Poor ©

Bad **

Defective **

Eamon MCMXCII

Origins

In the mid-70's, if you had a 300-baud modem terminal, you could dial up most 'time share' systems and play the first computer adventure. "Adventure Land" ("The Adventure", etc.) was—in fact, still IS—a textonly game which challenges the player to solve puzzles, overcome hazards, and collect goodies. In a 'Text Adventure', you type in commands and get text descriptions of what happens as a result. For instance, GO NORTH might produce something like "You are in a rocky gulch with high cliffs to the east and west. The way continues north and south. An iron grate covers an opening in the ground." (Hint: OPEN GRATE!)

With the arrival of for-real home computers like the Apple II, text adventuring really 'took off'. We had the Scott Adams quests (e.g. "The Pyramid of Doom"), Infocom's "Zork" (I-III), "Enchanter", "Wishbringer", etc., assorted adventures from other vendors, and 'home brew' efforts published in magazines like Computist and SoftSide. The early '80's also saw the beginnings of Eamon adventuring.

Eamon?

"Eamon" is not a single adventure. It is a text adventure play and authoring system originated by Don Brown. His idea was to provide both a character creation/jumping-off point for many adventures AND the tools by which he and fellow enthusiasts would produce an unending stream of new scenarios. Don wrote "The Beginner's Cave" and a few other early adventures; but, most of the over 200 Eamon's are by numerous creators who joined in later.

Indeed, "Eamon" is people. It is chiefly due to efforts of the many "fellow enthusiasts" that Eamon adventuring continues

to flourish. The Apple Avocation Alliance was largely responsible for organizing, numbering, and distributing the early Eamons. Besides writing several adventures, John Nelson helped collect submissions and expanded the capabilities of MAIN PGM (the main game program) through version 6.2.

Via the Eamon Adventurer's Guild (EAG), Tom Zuchowski deserves most of the credit for adapting to Apple II series improvements, assuring product quality, and, in general, maintaining order in modern Eamonville. Tom has also produced a number of scenarios; and, his version 7.0 of MAIN PGM is just one of many contributions to Eamon game development. Chuck Haight has been a solid Eamon supporter from its earliest days. Computist not only publishes Guild ads, but, as a distributor, supplies Eamon adventures and authoring materials (complete with fancy diskette labels!) at unbeatable prices.

The Guild does not pay for submissions and all Eamon materials are public domain. Anyone can copy them, place characters you and/or others who use the same "Eamon Master" (Main Hall) diskette can create; but, you can bring in only one hero per adventure. Since scenarios often allow some development of skills and attributes, players usually stick with a single character throughout their Eamon questing.

The Main Hall's most important attribute is that it leads to so many interesting places. Just select "Go on an adventure", pop in the diskette for your chosen quest, and you're off! As far as I know, no one has ever explained how leaving the Hall in this manner can place you at the mouth of a cave, before the gates of a city, on a Star Base launching platform, ...; or, indeed, how returning from such disparate locales so often lands you "on the road leading to the Main Hall". Tom Zuchowski has speculated about "strange forces" brought to bear by the influence of orbiting suns. My guess is that magic, super science, and time portals are all involved.

The Adventures

When Computist published its first major Eamon article in



them in user group libraries, or post them to bulletin boards. (Of course, club libraries and BB's are not nearly so likely to have the latest version of each adventure as is an official distributor like Computist.) Possibly, Eamon's best 'selling point' is that the many people who make it work do so, mainly, for fun.

"Eamon" is also a place, one dominated by an imposing structure known as The Main Hall. Here you can buy and sell arms and armor, bank your gold, and hire a wizard to teach you Eamon's four 'stock' spells (Blast, Heal, Power, Speed). Presiding over the Main Hall is a burly Irishman whose first question is always "What's yer name?"

To get started, you enter a character name. If the name is not found in the CHARACTERS file, the character is created—you pick gender and the program assigns Hardiness, Agility, and Charisma plus skills numbers for five Weapon types (Spear, Axe, Club, Bow/Gun, Sword) and Armor use. There is no strict limit on the number of

1983 there were only about 25 adventures; but, even then, quality varied wildly from scenario to scenario. Thanks to the EAG, serious bugs have, for the most part, been tracked down and eliminated; and new submissions are checked out more thoroughly. The Guild publishes a 10-page journal (four issues per year/ \$7) where fixes for any newly discovered bugs appear. Along with news and reviews of late releases, each issue also lists authors and ratings for all 200+ adventures.

By far, the majority of Eamons are built around swords & sorcery themes running the gamut from whimsically Zorkian wanderings through Conanesque quests and Dragonlance-style crusades. Others may send you back to the time of dinosaurs, into the future to battle robots and mad scientists, drop you into a modern city to solve a crime, deposit you at the entrance to a haunted manse, or There really is no limit to the possibilities. In terms of both numbers and variety, the challenge is practically endless.

Relatively few scenarios incorporate actual mazes (i.e. places where you are supposed to get lost); but, with up to 200 locations allowed via the standard game program, exploration is a goodly portion of every Eamon challenge. Most players rely upon simple line-and-box maps to keep track of treasures, puzzle-locked doorways, and other key features of the gamescape.

More so than in most other text adventures, critical achievements in Eamon tend to involve overcoming dangerous adversaries. In combats you trade blows to ATTACK MINO-TAUR, BLAST GOLEM, etc. until all the bad guys are dispatched or flee. Most scenarios allow you to flee as well (one or more particularly aggressive monsters may follow) and a few permit three or four restorations should YOU be the one dispatched. Usually, getting killed ends the game and you must either create a new character or use a resurrection utility to restore the old one.

Some Infocom devotees may be turned off by Eamon's emphasis upon combat. Understandable; however, there are numerous adventure-enhancing side benefits. First, the need to overcome adversaries, makes character development and acquisition of better weapons 'mean something'. It greatly increases the stake you have in your character. Second, not all "monsters" are unfriendly; some will join you for the duration of a quest. (In Eamon, every character is, technically, a "monster". This includes critters, as well as guards, wizards, elf bowmen, princesses, etc..) Acquiring helpful recruits adds another dimension to the challenge; and, besides, it's more fun to go questing with stalwart companions at your side. Finally, as a Russian revolutionary once observed: "You can't make a soup without slicing monsters." Crusading against evil wizards, wicked queens, and other powerful foes naturally tends to be a rough business.

In text adventuring, "parsing" is equated with how well the game seems to understand your typed-in commands. A very good parser, such as the one you find in Infocom games, can make sense out of inputs that 'sound' the way people really speak. Since you don't have to fish around for just the right command, it is much easier to try out ideas. You play the game, not the game program.

Most Eamon adventures employ a two-word parser. To move, you enter commands like GO NORTH (or NORTH, or N). You may also OPEN CHEST, GET JEWEL, ATTACK VAMPIRE, DRINK POTION, READY LONG BOW, READ SIGN, Typically, an adventure recognizes 50-75 command words and the names of any

monsters and artifacts. (The reason for the variation in number of available commands is that many authors modify MAIN PGM, which is in BASIC, to add words.) Entering an invalid command automatically produces a list of commands the particular game understands.

The down side of Eamon's simple parser is that you must sometimes experiment to find the command that does what vou know must be done. Scenario development is also impacted. To assure playability, Eamon authors have tended to avoid building-in complex puzzles. The up side is that, by the time you've gotten through your first two or three adventures, you have a good feel for how the commands are used and pretty well know what works and what doesn't. Then, too, many pre-Version 7.0 games employ author-originated mods which let the program understand synonyms, make sense of command abbreviations, and otherwise behave more intelligently. All of these are standard 7.0 features, as are improved capabilities for checking the status and inventory of any ally, trading items, and handling puzzle-oriented entries like PUT CUBE IN SLOT.

With so many games produced by so many authors, quality continues to vary a great deal. EAG nails bugs; but there's no question that some worlds are better 'filled-out' with richer prose and more interesting challenges. Playing time is another inconsistent variable. Most of the early adventures offer no GAME SAVE; yet, some may be good for barely an hour while others can run to four or five. The range is even larger for the newer games (including several multidiskette quests) which often do, happily, offer a SAVE option.

Picking a 'good one' is a lot like shopping for something to read: you look for a juicy sounding title and a favorite author. EAG's reviews and ratings are a fair guide, too. (Each adventure is rated on a 1-10 scale; 10 is highest.) Predictably, however, many fun-to-play early adventures tend to be down-rated due to lower playing times. Most scenarios fit on a single diskette; and, at \$1 each, you can afford to go for 'good prospects' AND experiment with 'unknowns'. A ten or twentydollar investment is guaranteed to deliver several evenings of adventuring challenge.

Eamoneering

Back in the early days of computer adventuring we collected Eamons more or less automatically from our local user group (HAAUG) library. Incredibly, I did not become a player until just the last couple of months, when curiosity about the adventures included on Computist Library Disks took hold. So far I've made it through thirty

or so scenarios. Fun (and more than 170 still ahead!); but, the real hook turned out to be the 'other side' of Eamon: programming and game development.

Among our vintage "AAA Eamon" adventures I came upon one not listed by EAG! (Kind of like finding an unpublished Brahms symphony.) "The City of Sorcerers" was playable; but, one notable bug and some undeveloped areas of the gamescape made it obvious the adventure was not quite finished. (Also, a dead give away, an early version of the dungeon editor was on the same diskette.)

I fixed the bug and began to fill-in some gaps and polish a few rough edges with the idea of sending "City" to EAG for registration under the original author's name. Well, one thing led to another and it soon became clear that 1. the version 6.x DUNGEON.EDIT I was using needed a user-friendliness transplant; 2. the version of MAIN PGM (which wasn't even named "MAIN PGM" in those days) imposed too many restrictions BECAUSE 3. I was making so many changes that a completely new adventure was taking shape! With the latter realization I copied the original, added the REMed bug fix, and mailed it to the Guild. "The City of Sorcerers" was where it belonged in the first place; and I was free to develop my own sce-

First, I needed a better editor. NUEDIT began as a program intended to allow a player or designer to 'walk through' a gamescape (using normal N, S, etc. commands) and read descriptions without having to fight monsters. With a nice text editing routine lifted from DUNGEON.EDIT and using Beagle's Program Writer (\$49.95) running on the IIgs, it wasn't long before the new editor was ready for serious work. (Writing NUEDIT was fun and a valuable refresher course in BASIC. In case you are thinking of learning a new programming language: Step One is to find something interesting to program.)

armed Anyway, version of MAIN PGM, I was enmeshed in sculpting my new scenario when what should arrive in the mail but Tom Zuchowski's version 7.0 package! Complete with on-disk manual, this IS a major upgrade (still DOS 3.3-based) offering a larger gamescape, better speed, built-in GAME SAVE, and optional 80/40 column display. To which you can add a host of new artifact types (e.g. containers, keys, hidden doors, ...), better parsing, and other features guaranteed to enhance puzzle development. My 'old format' files were soon moved to 7.0. As for EAG's 7.0 editor, it is an improvement, but still too cumbersome. NUEDIT.6 became NUEDIT.7.

Along with the version 7.0 game creation materials, Tom included a beta version of a new "Multi-disk Supplement" (which, he notes, has never actually been used to create a game) and materials for authoring in 40 or 80 column ProDOS. Since my adventure is not seriously pushing 7.0's normal 1diskette limit, and DOS 3.3 works on our II+ and IIgs, and our Eamons are all DOS 3.3 versions, I haven't tried the MDS or ProDOS stuff yet. (Speed would be a decisive Pro-DOS advantage except that most "DOS 3.3" users actually run some version of Beagle's Prontodos.)

Granted, ProDOS may be 'the wave of the future'; and, in fact, EAG now has ProDOS versions of roughly half the adventures. For now, 7.0 under '3.3 is, by far, the best tested, best documented format for Eamon authoring. Most of the newly released 'Guide for Eamon Adventure Designers and Players is devoted to version 7.0 play, utilities, and programming.

Note: The 21-page 'Guide' is available from Computist. It's the best introduction yet to Eamon adventuring AND it saves the bother of printing out the on-disk 7.0 manual. You'll find plenty of nuts & bolts detail covering Eamon text files, MAIN PGM, and LEADIN PRO-GRAM (a 'raw' game startup program where you can place introductory text; etc.). Evidently, the booklet is free with every order. There is one error— one which occurs in the on-diskette manual, too- on page 14, artifact Format 1 shows parm 5 as "Weapon type" and parm 6 as "Complexity"; it should say parm 5 is "Complexity" and parm 6 is "Weapon type".

The 'Guide' recommends that a game author have most of his/ her scenario mapped-out BE-FORE even booting up the editor. Perhaps experienced Eamon makers actually do it that way. Newcomers, however, can learn a great deal by with starting with a rough idea, cre-UEDIT.6 and a more modern ating a few rooms with neat things to find and monsters to fight; and, then, giving the new adventure a try as a player. Changing (a copy of) an existing adventure is another good way to get started. Whatever your approach, once into creating an Eamon world you won't want to stop. Eamoneering is addictive stuff!

No PC?!

As far as I know, there is no PC or other non-Apple II equivalent for the Eamon Guild of Adventurers. (And, after speaking with Tom Zuchowski, my impression is that Hell may well freeze over before EAG changes its II-only policy.) Clearly, converting and test-playing 200+

adventures for another machine format is the sort of task one normally assigns to a monastery. It isn't likely to happen.

Happily, our PC-only readers can get into Eamon via a lowcost 'Eamon Kit'! According to flyers from some Apple-stuff vendors, an Apple II+ with mono monitor sells for \$58. Add a disk drive and 80-column card (required for just a few adventures) and your total cost should fall somewhere around \$200. (Comparable IIe and IIgs 'kits' sell for about \$450.)

The Programs

NUEDIT.792 lets you edit a version 7.0 adventure or create one from scratch on a formatted diskette. (It will work in 40 or 80 column mode, whichever is active when the program is run.) When started, NUEDIT first asks you to insert the diskette to be edited. If NUEDIT detects an incompatible version it will tell you and then exit. If a compatible (7.x) version is detected NUEDIT takes you to the main menu ready to do editing.

If no adventure is found, NUEDIT will ask if you want to start a new adventure; if "YES", you will be asked for a name and the number of movement directions (6 for NSEWUD or 10 to permit NE, NW, etc. movement). NUEDIT then creates the standard Eamon TEXT files (7.0 default values are in parentheses):

EAMON.NAME: Name of the adventure, Number of directions (6 or 10), and Version number (7.0)

EAMON.DESC: descriptions of Rooms (records 1-200), Artifacts (201-400), Effects (401-600), Monsters (601-800). 'DESC Record length is 242; max length of each description is 238. Record 0 of this file has current counts of rooms, artifacts, effects, and monsters followed by record lengths for the 'ROOMS (72), 'MONSTERS (92), and 'ARTIFACTS (72) files.

EAMON.ROOMS: Each record has Name of a "room"/ location (max length= 38), room # Destination for each movement direction (for each direction, 0= none), and room Lumination (1 = lighted, 0 means theplayer must have a lighted torch, etc. to see).

EAMON.ARTIFACTS: Each record has Name of the artifact (max length= 30), Value in gold, Type #, and Starting location plus four additional parms. The meaning of the latter depends upon artifact type. The 7.0 MAIN PGM recognizes 11 artifact types (e.g. Treasure, Weapon, Container, Door, etc.). NUEDIT includes formats/labels for all 11 and allows 4 additional user-defined types.

EAMON.MONSTERS: Each record has Name of the "monster" (max length= 30) followed by 11 parms to set hardiness, friendliness, starting room #, etc.. Each record can describe just one monster or a group of same-kind monsters.

There is no separate 'EF-FECTS file because an effect is a text message (max length=238) contained entirely in 'DESC.

At the start of new adventure creation, NUEDIT writes just one dummy record for each game element (room #1, artifact #1, effect #1, and monster #1).

Once at the main menu you press 'R' to view/edit Rooms, 'A' for Artifacts, etc.. When 'R', 'A', 'E', or 'M' is selected you are given the choice of entering the number of the room, etc. to view/edit OR pressing '+' to create one or more new records. (i.e. after selecting 'M', pressing '+' and entering "25" will create 25 dummy, ready-to-edit monster records.)

Most of the time you will be viewing/editing. For example, pressing 'R' and entering "73" will produce a display showing the room #, Room 73's name, the room's description, and the # of the room or door/gate you can reach by movement in each direction. Prompts at the bottom of the screen indicate that you may move to Room 72 or Room 74 using the arrow keys; OR, you may move to a destination room by pressing a directions key (like 'N', 'S', etc.). If the destination is a door/gate artifact, NUEDIT checks to see that the door and 'room beyond' both exist and automatically moves you to the room on the other side of the door. (Note: NUEDIT ignores any attempt to view or do anything to a room, artifact, etc. which does not yet exist.)

Entering 'C' and then, say, "142" copies the current room to Room 142. Entering '#' and, say, "55" is a quick way to hop to Room 55.

'Z' lets you edit displayed information. The cursor is set at the beginning of each item's field and you enter text or numbers as appropriate. (Pressing 'RETURN' with no changes retains the original and moves you to the next item.) Text editing is the same as in EAG's editor (CTRL-I inserts a space, etc.). One important change is that any text character at the length limit for a Name or Description is automatically pushed out when you do an insert. When done, NUEDIT lets you 'Save' the changed Room, 'Redo' editing without throwing away your work, or scrap the changes (the original display appears). 'SPC' exits to the main menu and CLOSEs all open files.

Viewing and editing Artifacts, Effects, and Monsters works much the same. When you have fixed choices, as in picking an artifact's Type, the current selection is shown (e.g. "Container") and the "<--->" prompt reminds you to make

your selection using the arrow keys.

Other main menu options let you change your adventure's name or get a Room Connections display. The Name Change option affects the name stored in EAMON.NAME and, possibly, the name of the your adventure's startup program. (The startup program is a user-made program or renamed LEADIN PROGRAM which has the same name as the adventure. To start play MAIN HALL reads EAMON.NAME to get the adventure's name and runs the startup program, which ends by running the main game program.) If a startup program has not yet been placed on the adventure diskette or it is still named LEADIN PROGRAM, etc., then Name Change affects name only the EAMON.NAME.

The Connections option is very helpful for quickly checking your adventure's layout. It shows the selected room's destinations (or "exits") by direction ALONG WITH the exits for each destination. (Due to clutter, this option is not available in 10-direction mode.)

THE WONDERFUL WORLD OF EAMON and MAIN HALL programs have changed very little over the years. One enterprising author did produce an Ultima I-style map-graphics version of MAIN HALL. "Graphics MAIN HALL" seeks to patch a serious Eamon deficit, the absence of a cumulative Experience number, by letting you convert gold into attribute and skills boosts at various training centers and shops. GMH never 'caught on', partly because 1. It is too easy to overenhance your character; and, 2. Having to steer a figure around on the screen maps slows down transactions. Mainly, though, the problem is format. A graphics interface doesn't 'belong' in the Hall. The TEXT Main Hall remains the standard, accepted version because that's the way Eamon players like it.

Modified versions of Eamon's two core programs plus the new EXP.UPDATE program are listed in this issue. They add several enhancements without disturbing Eamon's traditional 'look' and feel:

recording of a character's adventures. The purpose is to up the stakes and deliver a more tangible payoff for player successes than mere gold. Advancting in Level and getting to increment Hardiness, Agility, etc.

Experience- The new MAIN HALL automatically runs EXP.UPDATE each time you return alive from an adventure. Your character gains Experience based upon gold obtained, new/better weapons brought back, and any gains in attributes and skills awarded by the scenario. Experience translates into Level advancement, whereupon you can select an attribute or skill to increase. The same program also records and displays the name of each adventure you have experienced along with the number of times played.

Roster- in 'WORLD OF EAMON, a new option lets you display names of all characters in the CHARACTERS file. You can also obtain an Experience display for any character showing adventures played and number of times for each.

Restoration- It is no longer necessary to run a separate utility to restore a killed-off character. In 'WORLD OF EAMON you need only visit The Temple of Restoration.

Locker- in MAIN HALL, a character who meets the Level requirement can buy a space in the Adventurer's Lockers. This space holds up to eight weapons. You can visit your locker at any time when at the Main Hall to deposit, retrieve, or swap-in items.

Status- the MAIN HALL character status display shows Experience and Level along with more detailed information on Magic skills and Armor Expertise. Similarly, displays for the Banker, Weapon Shop, and Magician now include useful information (e.g. gold in your possession, spells you already know, etc.) to help speed-up and simplify transactions.

Since installing the above enhancements, my dad and I have played through something like fifty adventures including ancient "AAA Eamon" versions of the earliest scenarios, newer 6.2 games with and without GAME SAVE, and the latest 7.0 scenarios. That the mods work and are compatible with any CHAR-ACTERS file and characters already in existence is not especially remarkable given that information is passed back and forth among Eamon programs via TEXT files. Inputs and outputs are clear-cut and easy to keep track of. The same applies to the two new files each active character acquires: a name.EXP file (for experience data) and a name.LOC file (for locker data).

Probably, the most important mod is the incorporation of a true Experience attribute and recording of a character's adventures. The purpose is to up the stakes and deliver a more tangible payoff for player successes than mere gold. Advanccrement Hardiness, Agility, etc. certainly qualifies. So does the 'status symbol' value of a high Level ranking. Now, even 'weakie' scenarios are worth completing; and, of course, a character with a long record of adventure credits (i.e. a genuine, provable history) becomes more real and more fun to play.

So far, so good. However, as veteran Eamoners well know, there are some adventures which shower the character with enormous wealth, hefty attribute boosts, and double-digit skills gains. Other scenarios may be just as extreme in the other direction. Either way, Experience would be devalued.

Consequently, EXP.UPDATE includes a 'change filter' which suppresses scenario-induced shifts in attributes and skills to just a point or so. In the same spirit, beyond roughly 10000 gold, wealth increase has little effect on calculated Experience gain; and, to squelch the 'honey pot' effect, potential Experience gain is less each time you replay any adventure.

Experience is also the one change likely to evoke some suspicion of risky, bomb-prone trickery. There are just three 'tricks', all fairly straightforward. First, to derive an experience gain, EXP.UPDATE compares the character's status and possessions before the adventure (saved in name.PRE) with status and possessions after.

To remember the name of the adventure, MAIN HALL copies it into the DOS error message area before running the adventure. This does no harm; and EXP.UPDATE is able to retrieve the name when you return. (If the adventure is restarted from a SAVEd game, EXP.UPDATE detects an invalid name and asks you to reinsert the adventure diskette long enough for it to read the name.) Finally, MAIN HALL needs to know whether it was RUN by an adventure's MAIN PGM (if you are alive, it sends you to EXP.UPDATE) or by either 'WORLD OF EAMON or EXP.UPDATE (you stay in the Main Hall). It can tell by PEEKing at the command buffer. The "RUN MAIN HALL" commands in 'WORLD' and 'UPDATE' have extra spaces inserted.

Of the other changes, only the Locker offers benefits which may not be apparent, especially to new players. The old MAIN HALL ownership limit of four weapons looks okay UNTIL you consider that 1. Weapons break! It's nice to have a good backup; 2. You want to develop skills for all FIVE weapon types; 3. It is handy to have some high quality weapons to carry into an adventure for use by allies you may acquire; and 4. When vou've got your Locker and it's full, you are certain to complain that the eight extra spaces are not nearly enough! (I settled for eight to avoid having to scroll the Lockers display.)

To install the enhanced Eamon play programs, first make a 'just in case' backup of your "Eamon Master" play diskette. Now, copy the new programs. The 'WORLD OF EAMON and MAIN HALL will replace versions already there. EXP.UPDATE uses 21 sectors; and, for the new .EXP and .LOC files which will be created, you should figure on 8 or so sectors per active character. That's it. Veteran Eamoners can look forward to a new dimension of play. As for newcomers, the Wonderful World of Eamon awaits!

The Wonderful World of Eamon

- 0 REM THE WONDERFUL WORLD OF EAMON
- 1 REM BOOT-UP PROGRAM FOR EAMON UNIVERSE
- 4 REM ORIG. RULES & CORE PROGRAMS BY DON BROWN
- 6 REM 7 REM ON-GOING
- DEVELOPMENT: TOM ZUCHOWSKI, E.A.G.
- 8 REM EAMON ADVENTURER'S GUILD 7625 HAWKHAVEN DR. CLEMMONS, NC 27012
- 9 REM (919) 766-7490
- 10 REM
- 11 REM PLAYER INPUTS CHARACTER NAME AND (IF EXISTING CHAR) GOES TO MAIN HALL.
- 12 REM IF NAME NOT IN 'CHARACTERS' FILE THEN 'NEW CARACTERS' PROGRAM IS RUN 1ST.
- 13 REM
- 14 REM 7/92 MODS BY JEFF HURLBURT (COMPUTIST MAGAZINE) 713-645-8680:
- 15 REM 1- PLAYER CAN RESTORE DEAD CHAR AT THE 'TEMPLE'.
- 17 REM 2- PLAYER CAN VIEW RXPERIENCE RECORDS OF CHARACTERS VIA THE 'ROSTER'.
- 24 REM
- 25 REM DRAGON PICTURE
- 26 REM DURING PROGRAM BY 27 REM R.L. PHILLIPS &
- 28 REM OF ANN ARBOR, MICH.
- 29 REM THE BEAUTY IS GREATLY
- 30 REM ENJOYED.
- 31 REM
- 50 GOTO 100
- 55 PRINT DK\$; "OPENOCHAR ACTERS, L150" : PRINT DK\$; "READOCHARACTERS, RO" : INPUT NC: PRINT : RETURN
- 60 HOME : HTAB INT ((40 -LEN (Q\$)) / 2): PRINT Q\$: FOR I = 1 TO 39: PRINT " " ; : NEXT I: PRINT : PRINT : RETURN
- 67 Q\$ = "R\$\$ O\$\$ S\$ T\$ E\$ R\$\$ O\$\$♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦
- 70 GOSUB 55: FOR R = 1 TO NC: PRINT DK\$; "READOCH ARACTERS, R" ; R: INPUT A\$
- 72 PRINT "["; SPC(R <10);R; "] \Diamond " ;: IF A\$ = "" THEN INPUT "" ; A\$: PRINT "-" ;
- 73 INPUT "" ; HD, AG, CH: PRINT AS;
- 75 HTAB 28: PRINT HD; "◊" ;AG; "◊" ;CH
- 77 NEXT R: PRINT DK\$ "CLOSE"
- 78 PRINT : INPUT "<CR>♦TO♦ EXITOORO#OTOOVIEWO>>O" ; A\$: IF A\$ = "" THEN 14079 QQ = ASC (A\$): IF QQ <
- 49 OR QQ > 57 THEN 140
- 80 QQ = VAL (A\$): IF QQ > NC THEN 140
- 81 GOSUB 55: PRINT DK\$; "READ OCHARACTERS, R" ; QQ: INPUT NA\$: PRINT DK\$ "CLOSE" : HOME : IF NA\$ = "" THEN PRINT : PRINT "FIRST, \OVOU\MUST\VISIT\O THE OTEMPLE" : PRINT "TOO RESTORE OTHIS OCHARACTER."
- : GOSUB 580: GOTO 67 82 PRINT "THE ADVENTURES **♦OF♦" NA\$: PRINT**
- 83 z = NA + ".EXP"
- 84 ONERR GOTO 95

- 85 PRINT DK\$ "UNLOCK" Z\$: PRINT DK\$ "OPEN" Z\$: PRINT DK\$ "READ" Z\$
- 86 FOR I = 0 TO 8: INPUT
- P(I): NEXT I 87 POKE 216,0
- 88 PRINT "LEVEL: ◊" ; P(2); " $\Diamond \Diamond \Diamond \Diamond \Diamond \triangle EXPERIENCE : \Diamond " ; P(1) :$ PRINT: FOR I = 1 TO 39: PRINT "_" ;: NEXT I: PRINT
- 89 POKE 34,6: VTAB 7:QQ =0:J = 1
- 90 FOR I = J TO P(0):QQ =QQ + 1: INPUT E\$, N%: PRINT E\$; SPC(31 - LEN (E\$));N%; LEFT\$ (" \langle TIMES", 6 - (N% = 1))
- 91 IF QQ > 14 THEN 93
- 92 NEXT I
- 93 QQ = 0: PRINT DK\$ "CLOSE" : PRINT "**◊<KEY>◊"** ;: **GET Q\$**: HTAB 1: PRINT SPC (9): PRINT : J = I + 1: IF J <= P(0) THEN PRINT DK\$
- "OPEN" Z\$: PRINT DK\$ "POSITION" Z\$ ",R" ;I * 2 + 9: PRINT DK\$ "READ" Z\$: GOTO 90
- 94 PRINT : POKE 34,0: GOTO 98
- 95 PRINT "THIS CHARACTER **♦DOES♦NOT♦YET♦HAVE**": PRINT "ANOADVENTURING ◊RECORD.◊" ;
- 97 GET Q\$: PRINT
- 98 POKE 216,0: PRINT DK\$
- "CLOSE" : GOTO 140 100 TEXT : HOME : NORMAL
- 105 PRINT : PRINT "EAMON **♦ ADVENTURER'S ♦ GUILD"**: PRINT "76250HAWKHAVEN **ODR.**" : PRINT "CLEMMONS, **♦NC♦27012"** : **PRINT** "(919)766-7490" : FOR I = 1 TO 250: NEXT : PRINT
- 110 DK\$ = CHR\$ (4): PRINT DK\$; "BLOAD OEAMON PIC, A\$4000" : ZZ = PEEK (-16299) + PEEK (- 16297) + PEEK (- 16302) + PEEK
- (-16304)120 X = RND (- PEEK (78)- PEEK (79))
- 125 PRINT DK\$ "OPENÔSNAPPY ,L64" : PRINT DK\$ "READ◊ SNAPPY, RO" : INPUT NS:R = INT (RND (1) * NS +1): PRINT DK\$ "READOSNAP PY,R" ;R: INPUT CM\$:C1\$ = LEFT\$ (CM\$, 23) : C2\$ =MID\$ (CM\$,24): PRINT DK\$ "CLOSE SNAPPY"
- 127 ONERR GOTO 131
- 130 PRINT DK\$; "OPENOCHAR ACTERS, L150" : PRINT DK\$; "READOCHARACTERS ,R0" : INPUT NC:R = 1 /NC: PRINT DK\$; "READ◊ CHARACTERS, R1" : INPUT A\$: PRINT DK\$ "CLOSE" : GOTO 135
- 131 POKE 216,0: PRINT DK\$ "CLOSE" : PRINT DK\$ "DELETE CHARACTERS" : PRINT DK\$ "OPENOCHAR "WRITE OCHARACTERS, RO" : PRINT 1: PRINT DK\$ "WRITE CHARACTERS, R1"
- 132 PRINT : PRINT "NUGUY92"
- 133 FOR I = 1 TO 12: PRINT "11" : NEXT I: PRINT "0" : PRINT "M" : PRINT "200" : PRINT "0" : PRINT "0"
- 134 FOR I = 1 TO 4: PRINT "NONE" : PRINT "0" : PRINT "0" : PRINT "0,0" : NEXT I: PRINT DK\$ "CLOSE"
- 135 POKE 216,0: FOR X = 1TO 500:I = RND (1): IF

PEEK (- 16384) < 128THEN NEXT X 137 X = PEEK (- 16368):

TEXT

- 140 HOME : PRINT "◊◊◊YOU **♦ ARE♦ IN♦ THE♦ OUTER♦ CHAM** BEROOFOTHE" : PRINT "HALLOOFOTHEOGUILDOOFO FREE ADVENTURERS." : PRINT "MANY OMEN OAND O
- 145 PRINT "AND OTHERE OIS **♦LOUD♦SINGING♦AND♦LAUGH** TER." : PRINT : PRINT "◊◊◊ON◊THE◊NORTH◊SIDE◊OF◊ THE CHAMBER IS"

WOMEN ♦ ARE ♦ GUZZLING ♦ BEER"

- 150 PRINT "A CUBBYHOLE ◊ WITH ◊A ◊DESK. ◊OVER ◊THE ◊ DESK" : PRINT "ISÔAÔSIGN **♦ WHICH ♦ SAYS ♦ 'REGISTER** ♦HERE"
- 152 PRINT "ORÔVISITÔTEMPLE **◊OF◊**RESTORATION" : PRINT "ORÔVIEWÔROSTER" : PRINT "ORÔELSE!'" : PRINT
- 160 PRINT : PRINT "DOÔYOUÔ GOOOVEROTOOTHEODESK, OJOIN **♦ THE"** : PRINT "**♦ BEER** DRINKERS, ♦VISIT♦THE♦ TEMPLE, OR" : PRINT "◊◊CHECK◊OUT◊THE◊ROSTER **◊OF◊HEROES?"**
- 190 PRINT : PRINT "◊◊(HIT◊ 'D'\OR\OR\OR\O'R'.)\O\O' ;: GET A\$: PRINT : IF A\$ = "D" THEN 220
- 195 IF A\$ = "T" THEN GOSUB 500: PRINT : GOTO 140
- 197 IF A\$ = "R" THEN 67 200 IF A\$ < > "B" THEN 140 210 PRINT : PRINT : PRINT "◊◊◊AS◊YOU◊GO◊OVER◊TO◊THE **⊘MEN, ⊘YOU⊘FEEL"** : PRINT : PRINT "A SWORD BEING ! THRUST OTHROUGH OYOUR
- **♦BACK**" 215 PRINT : PRINT "AND YOU **♦ HEAR♦ SOMEONE SAY, • YOU ♦ REALLY"** : PRINT : PRINT "MUST OLEARN OTO OFOLLOWO
- DIRECTIONS!'" : GOTO 345 217 Q\$ = "T \Diamond H \Diamond E \Diamond \Diamond M \Diamond A \Diamond I \Diamond N \Diamond \Diamond $D \le \le \le \le K$ " : GOSUB 60: RETURN
- 220 GOSUB 217: PRINT "YOU **♦ ARE♦ GREETED♦ HERE♦ BY♦ A ♦BURLY"** : PRINT : PRINT "IRISHMANOWHOOLOOKSOATO YOU OWITH OAOSCOWL" : PRINT : PRINT "AND ASKS **◊YOU, ◊'WHAT'S◊YOUR◊NAME**
- ?'" : GOTO 235 230 PRINT
- 235 PRINT : PRINT "YOU◊ GIVE OHIM OYOUR ONAME." : **PRINT** : **INPUT** "◊>>>◊" ; NAME \$
- 239 IF NAME = "" THEN GOSUB 217: VTAB 5: PRINT "'NO\$NAME, \$NO\$GAME.\$YE\$ CANNAÔBEÔNOSIN'" : PRINT PRINT "ABOUT OTHE OHALL O NAMELESS! ♦ COME BACK "YE \Diamond BE \Diamond READY \Diamond TO \Diamond MAKE \Diamond A \Diamond BITOO'OSENSE.'" : GOSUB 580: GOTO 140
- ACTERS, L150" : PRINT DK\$ 240 PRINT : IF LEN (NAME\$) < 2 OR LEFT\$ (NAME\$,1) < "A" OR LEFT\$ (NAME\$,1) > "Z" THEN GOSUB 400: GOTO 230
 - 250 IF LEN (NAME\$) > 20 THEN GOSUB 217: PRINT "'" NAME\$ "?!'" : PRINT : PRINT "OOOHEOSCOWLSOAT **◊YOU◊AND◊SAYS**, **◊'YER"** : PRINT : PRINT "NAME'S TOOOLONGOFEROMEOBOOK.OOI **♦ CANNA"** : PRINT : PRINT "USE OMORE OTHAN OTWENTY **♦LETTERS."** : PRINT : GOTO 230
 - 260 PRINT "◊◊HE◊STARTS◊ LOOKING THROUGH HIS BOOK, " : PRINT : PRINT

- "MUTTERING ◊ ABOUT ◊ " ; C1\$: PRINT : PRINT C2\$: PRINT 270 GOSUB 55: FOR R = 1 TO NC: PRINT DK\$; "READ◊ CHARACTERS, R" ; R: INPUT A\$: IF A\$ = NAME\$ THEN330
- 280 NEXT R: PRINT DK\$: PRINT "◊◊◊HE◊EVENTUALLY◊ LOOKS AT YOU AND SAYS, " : PRINT : PRINT "'YER **♦NAME** 'S**♦NA♦IN♦HERE**.**♦HAVE ♦YE♦GIVEN"** : PRINT : PRINT "ITOOMEOARIGHT ?'" : PRINT : PRINT "HOWODOOYOUOANSWERO (HITO 'Y'ÔORÔ'N')ÔÔ" ;
- 290 GET A\$: PRINT A\$: PRINT : IF A\$ = "N" THEN GOSUB 400: GOTO 230 310 PRINT "◊◊◊HE◊HITS◊HIS◊ FOREHEAD AND SAYS, S'AH, " : PRINT : PRINT "YE MUST
- **OBEONEWOHERE! OWELL**, **OWAIT ♦JUST"** : PRINT : PRINT "A\MINUTE\AND\I'LL\BRING\ SOMEONE OUT OTO" : PRINT : PRINT "TAKE CARE OF **♦YE.'": PRINT**
- 320 GOSUB 350: PRINT DK\$; "RUNONEWOCHARACTERS .S6.D1"
- 330 PRINT DK\$: PRINT : PRINT "♦♦♦HE♦LOOKS♦UP♦ AND ♦ SAYS, ♦ 'AH, ♦ HERE ♦ YE" : PRINT : PRINT "BE!◊ \Diamond WELL, \Diamond GO \Diamond AND \Diamond HAVE \Diamond FUN \Diamond INOTHEOHALL! " : PRINT 340 GOSUB 350: PRINT DK\$; "RUNOOMAINOHALL, S6, D1"
- 344 REM ///END: CLOSE ADDED
- 345 PRINT DK\$ "CLOSE" : PRINT : END 350 PRINT DK\$; "OPENÔTHE
- **♦ADVENTURER"** : PRINT DK\$; "WRITEOTHEOADVEN TURER" : PRINT NAME\$: PRINT R: PRINT DK\$;
- "CLOSE" : RETURN 399 REM ///NO NAME ROUTINE
- 400 GOSUB 217: VTAB 5 410 CNT = CNT + 1: IF CNT> 1 THEN 450
- 420 PRINT "OHEOPULLSOOUTO $A \circ SWORD \circ AND \circ BEGINS \circ TO$: PRINT "SHARPENOIT, OSAY ING◊'YE'D◊BEST◊BE◊ GIVIN'" : PRINT "ME OYER O NAME ♦ LADDIE, ♦ IF ♦ YE ♦ KNOW **♦ WOTS"** : PRINT "GOOD♦FER
- **♦XE**!!!" 430 RETURN
- 450 IF CNT = 2 THEN PRINT "I'VE\\'BOUT\\HAD\\ME\\FILL\\ O'OYEROSICK" : PRINT "SENSAO'UMOR!!" : PRINT "NOWOGIMMEOYERONAME!!" :
- 460 IF CNT = 3 THEN PRINT "THE MAN CUTS ONE OF YOUR OF INGERS OFF!!" : PRINT "HEOTHENOEATSOIT!! !!" : PRINT "THENÔHEÔ SAYS \ 'ARE \ YE \ READY \ T' **♦TALK♦NOW?"** : RETURN
- 470 IF CNT < 13 THEN PRINT "THE MAN CUTS OFF ANOTHER FINGER!!!" : PRINT "HE EATS THIS ONE **♦TOO!!"** : RETURN
- 480 PRINT "THE OMAN OSTARTS O SLOWLY, ◊'WELL◊YE◊BE◊" : PRINT "OUTTAOFINGERS!'" : PRINT "THE OMANOTHENO SPINS AROUND AND RUNS **◊YOU"** : PRINT "THROUGH◊ WITH A SPEED YOU HAVE
- **♦NEVER"** : PRINT "SEEN**♦** BEFORE! (AND NEVER WILL **♦ AGAIN.)** " : GOTO 345
- 499 REM THE TEMPLE 500 Q\$ = "THE \Diamond TEMPLE \Diamond OF \Diamond RESTORATION" : GOSUB 60
- 505 PRINT "WHO♦IS♦TO♦BE **♦RESTORED?"** : PRINT :

INPUT " $\diamond > \diamond$ "; NA\$ 510 IF NA\$ = "" OR NA\$ = "◊" THEN 590 530 GOSUB 55: FOR R = 1 TO NC: PRINT DK\$ "READ◊ CHARACTERS, R"; R: INPUT N\$: INPUT ME\$ 535 IF N\$ = NA\$ THEN PRINT : PRINT N\$ "♦IS♦IN♦GOOD **♦SHAPE!"**: PRINT DK\$ "CLOSE": GOTO 580 540 IF N\$ < > "" THEN 555 550 IF ME = MID (NA, 2)THEN 560 555 NEXT R: GOTO 570 560 PRINT DK\$ "WRITE◊ CHARACTERS, R"; R: PRINT NA\$: PRINT DK\$ "CLOSE" : PRINT : PRINT "OKAY, ◊" ; NA\$; "\OIS\ORESTORED!" : GOTO 580 570 PRINT "IÔCAN'TÔFIND **♦ANY♦DEAD♦"** ;NA\$: PRINT DK\$ "CLOSE" 580 PRINT : PRINT "<KEY>◊" ;: GET Q\$: PRINT Q\$ 590 RETURN

Checksums

0-\$92CC 86-\$AE33 235-\$BC93 1-\$DB99 4-\$8756 88-\$3639 6-\$9CE1 89-\$DF9B 250-\$E70C 90-\$6282 260-\$C0AF 7-\$2AFA 91-\$4C59 270-\$D082 8-\$D0BB 9-\$4029 92-\$0E8B 280-\$E968 10-\$17DA 93-\$DDC7 290-\$152F 11-\$9535 94-\$CA4C 310-\$FEB2 12-\$CB6C 95-\$704C 320-\$DE26 13**-**\$03FA 97-\$C0D1 330-\$6EE6 14-\$8039 98-\$51C4 340-\$9A60 344-\$E076 15-\$5232 100-\$097E 345-\$97A8 17-\$9D8D 105-\$2E40 24-\$8316 110-\$CD05 350-\$E475 120-\$F060 25-\$8144 399-\$0C1F 26-\$86ED 125-\$E482 400-\$4CE3 27-\$B6A6 127**-**\$D003 410-\$0CD7 28-\$4CCD 130-\$699C 420-\$837F 29-\$5E0B 131-\$08EF 430-\$9023 30-\$1DDA 132-\$7654 450-\$354C 31-\$9535 133-\$00D8 460-\$65EA 50-\$52D6 134-\$BE80 55-\$4B64 135-\$7800 480-\$D0E3 60-\$4180 137-\$4869 499-\$9211 67-\$2AED 140-\$351F 500-\$E351 70-\$30BA 145-\$6214 505-\$B2FB 510-\$653C **77 NEXT I** 72-\$BFE3 150-\$B068 152-\$D9E3 73-\$5BC6 530**-**\$282A 75-\$B0AA 160-\$14B1 535-\$6775 77-\$DC8A 190-\$43AA 78-\$271B 195-\$1B5D 79-\$5E26 197-\$B401 555-\$4618 80-\$24AF 200-\$D3FF 560-\$5E6F 81-\$ABB5 210-\$AAF4 570-\$D39B 82-\$739E 215-\$1DB0 580-\$DCBD 83-\$70FE 217-\$4AD1 590-\$2537 84-\$82A7 220-\$8950 85-\$7E2B 230-\$7A6F

Main Hall

- 0 REM
- 1 REM MAIN HALL (BUY STUFF & GO ON ADVENTURES) ORIG. BY DONALD BROWN 2 REM
- 3 REM REV. 9/92: ADDS LOCKER/ IMPROVED CHAR

STATS DISPLAYS/

- EXPERIENCE ... 4 REM BY JEFF HURLBURT (COMPUTIST MAGAZINE)
- 713-645-8680 5 REM 8000 SUB: Q9=1 MEANS
- HALL RUN FROM AN ADVENTURE
- 7 GOSUB 8000
- 8 PRINT CHR\$ (4) "MAXFILES\3"
- 9 TEXT : HOME : NORMAL : SPEED= 255

Editors note: "In line #10, U\$

contains 39 underlines.

10 DK\$ = CHR\$ (4):U\$ =

- 16 VTAB 5: PRINT "EAMON◊ ADVENTURER'S GUILD": PRINT "7625♦HAWKHAVEN **ODR.**" : PRINT "CLEMMONS, **NC**027012"
- 17 DIM SA% (5), WA% (6), WN\$ (6), WT% (6), WO% (6), WD% (6) ,WS*(6),LN\$(8),LT*(8),LO%(8), LD%(8), LS%(8)
- 20 ONERR GOTO 7000 30 PRINT DK\$; "OPENÔTHEÔ ADVENTURER" : PRINT DK\$; "READ OTHE OAD VENTURER" : INPUT NAME\$: INPUT REC:
- PRINT DK\$; "CLOSE" 35 IF Q9 = 1 THEN PRINT DK\$ "RUNEXP.UPDATE" :
- 37 ONERR GOTO 49 38 Q\$ = NAME\$ + ".EXP" :PRINT DK\$ "OPEN" Q\$: PRINT DK\$ "READ" Q\$: INPUT XN, XE, XL: PRINT DK\$ "CLOSE"
- 87-\$EF54 239-\$A457 **40 REM OLD ONERR GOTO100** 240-\$E971 **42** Q\$ = NAME\$ + ".LOC" : PRINT DK\$ "OPEN" Q\$: PRINT DK\$ "READ" Q\$: FOR I = 1 TO 8: INPUT LN\$(I) ,LT%(I),LO%(I),LD%(I) ,LS%(I): NEXT I:LQ = 1
 - 49 PRINT DK\$ "CLOSE" 50 PRINT DK\$; "OPENOCHAR ACTERS, L150" : PRINT DK\$; "READOCHARACTERS,R" ; REC: INPUT NAME\$: INPUT HD, AG, CH: FOR X = 1 TO4: INPUT SA%(X): NEXT: FOR X = 1 TO 5: INPUT

WA% (X): NEXT : INPUT AE

- 60 INPUT SEX\$ 70 INPUT GOLD, BANK: INPUT AC: FOR W = 1 TO 4: INPUT WNAME\$(W), WTYPE% (W), WODDS%(W), WDICE%(W) , WSIDES% (W): NEXT W:
- PRINT DK\$; "CLOSE" 470-\$7D68 **73 FOR I = 1 TO 4: IF** WN\$(I) = "" THEN WN\$ ="NONE"
 - 75 IF WN\$(I) = "NONE" THEN WO%(I) = 0:WD%(I) =0: WS%(I) = 0
 - 80 DEF FN P(X) = INT (X \star RTIO + .5)
- 540-\$DC11 **90 POKE 216,0** 550-\$25CC **100 HOME** :**Q** = **FRE** (0) 102 HTAB 9: PRINT "T♦H♦E♦
 - **ØMØ**A**Ø**I**Ø**N**Ø**Ø**HØ**A**Ø**L**Ø**L" : FOR I = 1 TO 39: PRINT " " ;: NEXT I: PRINT : PRINT 105 PRINT "ASÔYOUÔWANDERÔ
 - ABOUT OTHE OHALL, OYOU" : PRINT "REALIZE YOU CAN **♦DO♦ONE♦OF♦SEVEN♦THINGS:"** : PRINT : PRINT "♦1.♦♦GO ONOANOADVENTURE." : PRINT : PRINT "♦2.♦♦VIS ITOTHEOWEAPONOSHOPOFOR ♦ARMS."
 - 110 PRINT : PRINT "◊3.◊ **♦ OHIRE ♦ A ♦ WIZARD ♦ TO ♦ TEACH ◊YOU◊SPELLS."** : PRINT : PRINT "♦4.♦♦FIND♦THE♦ BANKEROTOODEPOSITOOR" : PRINT "OOOOWITHDRAW **♦SOME**♦GOLD.": PRINT: PRINT "♦5.♦♦EXAMINE♦ YOUR ABILITIES."
 - 115 PRINT : PRINT "♦6.♦♦GO **♦TO♦THE♦ADVENTURERS** LOCKERS." : PRINT : PRINT "07.00TEMPORARILY **◇LEAVE◇THE◇UNIVERSE**."
 - 120 PRINT : PRINT : PRINT "(HITOTHEOKEYOFOROYOUR **♦** CHOICE, **♦**1-7) ";

- 130 GET A\$:CMD = VAL (A\$):IF CMD < 1 OR CMD > 7 THEN 130
- 140 PRINT CMD: PRINT : ON CMD GOTO 1000,2000,3000, 4000,5000,5500,6000 200 PRINT NAMES
- 202 PRINT HD: PRINT AG: PRINT CH: FOR X = 1 TO 4: PRINT SA%(X): NEXT: FOR X = 1 TO 5: PRINT WA% (X): NEXT : PRINT AE:
- 210 PRINT GOLD: PRINT BANK: PRINT AC: FOR W = 1 TO 4: PRINT WNAME\$(W): PRINT WTYPE% (W): PRINT WOODS% (W): PRINT
- WDICE%(W): PRINT WSIDES% (W): NEXT W

PRINT SEX\$

- 300 IF LQ THEN Q\$ = NAME\$ + ".LOC" : PRINT DK\$ "OPEN" Q\$: PRINT DK\$ 8: PRINT LN\$(I): PRINT LT%(I): PRINT LO%(I): PRINT LD%(I): PRINT LS%(I): NEXT I: PRINT
- 310 RETURN

DK\$ "CLOSE"

220 RETURN

- 1000 HOME : Q = LEN (NAME\$)1003 PRINT DK\$; "OPEN◊ DK\$; "WRITE CHARACTERS ,R" ; REC: PRINT : PRINT RIGHT\$ (NAME\$, Q - 1): GOSUB 202: PRINT DK\$; "CLOSE"
- 1005 Q\$ = NAME\$ + ".PRE" : PRINT DK\$ "OPEN" Q\$: PRINT DK\$ "WRITE" Q\$: GOSUB 200: PRINT DK\$ "CLOSE" Q\$
- 1007 GOSUB 300
- 1010 HOME : VTAB 5: PRINT "INSERTODISKETTEOWITHO ADVENTURE (OR KEEP": PRINT : PRINT "THIS DISK ETTE OF OR OBEGINNERS OCAVE) **◊IN"** : PRINT : PRINT "DISKODRIVEOINOSLOTOSIX, **ODRIVEONEOTHEN**" : PRINT : PRINT "HITO'C'" : PRINT : PRINT : PRINT : PRINT "◊◊◊◊◊" ;: POKE -
- 16368,0 1020 GET A\$: IF A\$ < > "C" THEN 1020
- 1030 PRINT
- 1040 PRINT DK\$; "OPEN◊ EAMON.NAME" : PRINT DK\$; "READ EAMON . NAME" :
 - INPUT ADNAMES: PRINT DK\$; "CLOSE"
- 1045 GOSUB 8100 1047 HOME : FOR I = 1 TO
- 12:J = 25 I: VTAB I:PRINT U\$: VTAB J: PRINT U\$: NEXT I: FOR I = 12TO 1 STEP - 1:J = 25 -I: VTAB I: PRINT SPC (40): VTAB J: PRINT SPC(40): NEXT I
- 1050 VTAB 10: PRINT "YOU◊ **ARE** ABOUT OTO ADVENTURE **◊IN"** : PRINT : INVERSE : PRINT ADNAMES: NORMAL: PRINT : PRINT
- 1060 PRINT DK\$; "OPEN◊ FRESHOMEAT" : PRINT DK\$; "WRITEOFRESHOMEAT" : PRINT REC: GOSUB 200: PRINT DK\$; "CLOSE" : PRINT DK\$; "RUN♦" ; ADNAME\$
- 1920 FOR W2 = ZW TO4:WN\$(W2) = WN\$(W2 +
 - 1): $WT^*(W2) = WT^*(W2) +$ 1): $WO^{*}(W2) = WO^{*}(W2 +$
 - 1): $WD^*(W2) = WD^*(W2 +$ 1): $WS^*(W2) = WS^*(W2 +$
- 1): NEXT W2:WN\$(4) ="NONE" : RETURN
- 1940 HOME: HTAB 4: PRINT "I\G\M\O\O\S\\\L\O\C\K\E\

- ROS, OOIONOC.1941 PRINT US: GOSUB 5060:W = 0: FOR I = 1 TO4:W = W + WN\$(I) ="NONE" : NEXT I: PRINT : IF LQ < 1 THEN GOSUB 5008: PRINT : GOTO 1944 1942 X = 0: PRINT
- "INOSTORAGE---" : FOR I = 1 TO 8:X = X + LN\$(I)= "NONE" :Q = ABS (LO%(I)): PRINT LN\$(I);: HTAB (24 - (L0%(I) < 0)+ (Q < 10) + (Q < 100): **PRINT** LO%(I); "%◊◊◊◊"
- ;LD%(I); $^{\circ}$ D $^{\circ}$ ";LS%(I): NEXT I: PRINT
- 1944 RETURN 1945 FOR I = 1 TO 4: IF Q\$ < > WN\$(I) THEN NEXT I
- 1946 RETURN 1947 FOR I = 1 TO 8: IF Q\$ < > LN\$(I) THEN NEXT I
- 1948 RETURN "WRITE" Q\$: FOR I = 1 TO 1950 HOME : HTAB 10: PRINT "T \Diamond H \Diamond E \Diamond \Diamond B \Diamond A \Diamond N \Diamond K \Diamond E \Diamond R" : PRINT U\$: GOSUB 5008:
 - PRINT : PRINT : RETURN 1970 HOME: HTAB 10: PRINT "TOHOEOOWOIOZOAOROD" : PRINT US: GOSUB 5008: GOSUB 5010: PRINT :
- PRINT : RETURN CHARACTERS, L150" : PRINT 1990 HOME : HTAB 9: PRINT " $W \triangle A \triangle P \triangle O \triangle N \triangle S \triangle H \triangle O \triangle P$ " : PRINT U\$: GOSUB 5040: PRINT : GOSUB 5008:
 - PRINT : RETURN 1998 PRINT : PRINT "<KEY>0" ;: GET Q\$: PRINT Q\$: RETURN 1999 GOSUB 1998: PRINT :
 - GOTO 100 2000 GOSUB 1990: GOTO 2005
 - 2002 GOSUB 1998: PRINT 2003 GOSUB 1990: GOTO 2015
 - 2005 PRINT "AS \$\forall YOU \$\delta ER\$ THE OWEAPON OSHOP, OMARCOS" : PRINT "CAVIELLIO (THEO OWNER) ♦ COMES ♦ FROM ♦ OUT ♦ OF" : PRINT "THE BACK ◊ $ROOM \Diamond AND \Diamond SAYS, \Diamond 'WELL,$ **◊AS◊I**"
 - 2010 PRINT "LIVE AND BREATH, \Diamond IF \Diamond IT \Diamond ISN'T \Diamond MY \Diamond OLD OPAL" : PRINT NAME\$ "!" : PRINT
 - 2015 PRINT "SO, ◊YOU◊WANT **◊TO◊BUY◊A◊WEAPON**, **◊SELL**": PRINT "A WEAPON, OR GET **♦SOME**♦BETTER**♦ARMOUR**?"
 - 2017 PRINT : PRINT "(HIT $\Diamond SPC \Diamond TO \Diamond EXIT \Diamond OR \Diamond B, \Diamond S, \Diamond$ A) \(\text{"} \);
 - 2020 C2 = CH + INT (11 *RND (1) - 5):C2 = C2 +(C2 = 0) : RTIO = 10 / C22030 GET A\$: PRINT A\$: FOR TR = 1 TO 3: IF A\$ < >
 - MID\$ ("BSA" , TR, 1) THEN NEXT TR: GOSUB 1990: ON 1 + INT (RND (1) * 1.9)+ (GOLD < 300) GOTO 2210,2289,2113
 - 2040 PRINT : ON TR GOTO 2050,2220,2490
 - 2050 IF WN\$(4) < > "NONE" THEN GOSUB 1990: PRINT "MARCOS♦SMILES♦AT♦YOU♦ AND SAYS, S'THATSA" : PRINT "GOOD, OBUTOFIRST **◊YOU◊GOTTA◊SELL◊ME◊A"** : PRINT "WEAPON. YOU KNOWOTHEOLAW--NOOMORE **♦ THAN"** : PRINT "FOUR**♦** WEAPONS OPER OPERSON! '" :
 - PRINT: GOTO 2002 2060 GOSUB 1990: PRINT "MARCOS SMILES AT YOU **♦AND♦SAYS,♦'GOOD."**: PRINT "IOGOTTAOTHEOBEST. **◊YOU◊WANTA◊AXE**, **◊BOW**, ":
 - PRINT "MACE, ♦SPEAR, ♦ OR SWORD?" : PRINT : GOSUB 2650: IF A\$ = "X" THEN 2003

```
2070 GOSUB 1990: PRINT
                                   "(WEAPONÔNAME)Ô";W$: IF
  "MARCOS♦SAYS,♦'WELL,♦1♦
                                   W$ = "" THEN 2287
  JUSTOHAPPENOTO" : PRINT
                                 2283 FOR W = 1 TO 4: IF
  "HAVE OTHREEO" ;N$; "SOIN
                                   WN$(W) < > W$ THEN NEXT
                                   : PRINT : PRINT "MARCOS
  , ♦ OF ♦ VARYING" : PRINT
  "QUALITY. OI 'VEOGOTOAO
                                   ◊FROWNS◊AT◊YOU◊AND◊SAYS,
  VERYOGOODONEOFOR" :
                                   ◊'YOU" : PRINT "CAN'T◊
  PRINT FN P(2 * BP); "◊GP
                                   SELL\A\OWEAPON\YOU\DON'T
                                   ♦OWN!'" : GOTO 2002
  , \Diamond A \Diamond FAIR \Diamond ONE \Diamond FOR \Diamond " ; FN
  P(BP); "◊GP,"
                                 2285 IF W$ < > "NONE" THEN
2080 PRINT "AND ◊A ◊KINDA ◊
                                   2290
  SHABBYOONEOFORO"; FN
                                 2287 GOSUB 1990: PRINT
  P(BP / 2): PRINT
                                   "MARCOS♦SAYS, ♦'I♦THINK♦
  "WHICHODOOYOUOWANT?'" :
                                   YOU OARE OWASTING OMY O
  PRINT : PRINT "(HITOTHE
                                   TIME!"
                                 2289 PRINT : PRINT "MARCOS
  \langle KEY, \langle G \rangle F \rangle OR \langle P \rangle \rangle \rangle \rangle \langle V ;
2090 GET A$: PRINT A$: FOR
                                   ♦SHOOS♦YOU♦OUT♦OF♦HIS
                                   ♦STORE." : GOTO 1999
  Q = 1 \text{ TO } 3: \text{ IF } A\$ < >
  MID$ ( "GFP" ,Q,1) THEN
                                 2290 L = 5 * (LEFT$(W$,5)
  NEXT : GOTO 2287
                                   = "SWORD" OR LEFT$(W$,5)
2100 P = BP + BP * (Q = 1)
                                   = "SPEAR") + 4 * ( LEFT$
                                   (W\$, 4) = "MACE") + 3 *
  - BP / 2 * (Q = 3):P =
  FN P(P)
                                   (LEFT$ (W$,3) = "BOW"
2110 IF P < = GOLD THEN
                                   OR LEFTS (W\$,3) = "AXE"
  2120
                                   ): IF L = 0 THEN 2300
2111 GOSUB 1990: PRINT
                                2292 GOSUB 1990:N$ = LEFT$
  "MARCOS♦SHAKES♦A♦FINGER♦
                                   (W$,L): PRINT "MARCOS♦
  AT \Diamond YOU \Diamond AND \Diamond SAYS, ":
                                   FROWNSOATOYOUOANDOSAYS,"
  PRINT "'YOU SHOULDN'T
                                   : PRINT : PRINT "'THIS◊"
  PLAYOTRICKSOONOANOOLD! :
                                  N$ "\OIS\OA\OWEAPON\OLIKE\OI
  PRINT "FRIEND! " : PRINT
                                   ♦SELL," : PRINT
2113 PRINT "'COME ♦ BACK ♦
                                   "REMEMBER! '" : GOSUB
  WHEN YOU GOTTA MORE" :
                                   1998: GOTO 2420
  PRINT "GOLD OR OYOU WANT
                                2300 PRINT : GOLD = GOLD +
  ♦SOMETHING♦YOU♦CAN" :
                                  P:ZW = W: GOSUB 1920
  PRINT "AFFORD. ' MARCOS
                                2303 GOSUB 1990: PRINT
  ♦ WAVES♦ AS♦ YOU♦ LEAVE.":
                                   "MARCOS OGIVES OYOU OYOUR
  GOTO 1999
                                   OMONEY OAND OTAKES ":
2120 FOR W = 1 TO 4: IF
                                  PRINT "YOUR WEAPON." :
  WN$(W) = N$ THEN N$ = N$
                                   GOSUB 1998
  + "#" : GOTO 2120
                                2310 GOSUB 1990: PRINT
2130 NEXT W: FOR W = 1 TO
                                   "MARCOS◊ASKS◊YOU,◊'HOW◊
  4: IF WN$(W) < > "NONE"
                                   ABOUT BUYING A" : PRINT
  THEN NEXT
                                   "WEAPON?'" : PRINT :
                                  PRINT "(HIT\DiamondY\DiamondOR\DiamondN)\Diamond\Diamond\Diamond";
2140 \text{ WN}\$(W) = N\$:WT\$(W) =
  TP:WO%(W) = 10 * (2 -
                                2320 GET A$: PRINT A$: IF
  Q): WD%(W) = DICE: WS%(W)
                                  A$ = "Y" THEN PRINT :
  = SIDES:GOLD = GOLD - P
                                   GOTO 2050
2150 GOSUB 1990: PRINT
                                2340 PRINT : GOTO 2170
  "MARCOS♦HANDS$YOU$YOUR$
                                2350 GOSUB 1990: PRINT
  WEAPONÔANDÔTAKES" :
                                   "MARCOS◊ASKS,◊'WELL,
  PRINT "THE OPRICE OF ROMO
                                  ♦ WHAT ♦ WEAPON ♦ YOU" :
  YOU." : PRINT
                                  PRINT "WANTAORETURN?" :
2160 GOSUB 1998
                                  PRINT : GOSUB 2650:
2170 GOSUB 1990: PRINT
                                  PRINT : IF A$ = "X" THEN
  "HE♦NOW♦ASKS$YOU, $\"NOW$
                                  2003
  HOWÔABOUTÔSOME" : PRINT
                                2360 \text{ W2} = \text{W}: FOR \text{W} = 1 \text{ TO}
  "ARMOUR?'" : PRINT :
                                   4: IF LEFT$ (WN$(W), LEN
  PRINT "(HIT\DiamondY\DiamondOR\DiamondN)\Diamond\Diamond\Diamond";
                                   (N\$)) < > N\$ THEN NEXT:
2180 GET A$: PRINT A$: IF
                                  PRINT "MARCOS ◊ LAUGHS ◊
  A$ = "N" THEN PRINT : ON
                                  AND ♦ SAYS, ♦ 'YOU ♦ NEVER" :
                                  PRINT "BOUGHTOONEOFROMO
  1 + SH GOTO 2580,2210
2190 IF A$ = "Y" THEN 2490
                                  ME, OREMEMBER?'" : PRINT
                                   : GOTO 2002
2200 GOTO 2003
2210 PRINT "MARCOS♦SMILES♦
                                2370 BP = BP + BP * (WO%(T
  AND ♦ SAYS, ♦ 'COME ♦ BACK" :
                                  ) > 5) - BP/2 * (WO%(T))
                                  <-5):P = INT (BP/RTIO +
  PRINT "AGAINOSOON!'OAS
  ♦ OHE ♦ SHOOS ♦ YOU ♦ OUT ♦ OF ♦ HIS"
                                   .5): IF P > BP / 4 THEN
  : PRINT "SHOP." : PRINT
                                  P = INT (BP / 4 + .5)
  : GOTO 1999
                                2380 GOSUB 1990: PRINT
2220 GOSUB 1990: PRINT
                                   "MARCOS◊EXAMINES◊YOUR◊"
  "MARCOS◊ASKS◊YOU,◊'IS◊
                                  N$ "OAND" : PRINT "SAYS,
  THIS WEAPON YOU" : PRINT
                                  ◊'LOOKSA◊LIKE◊YOU'VE◊
  "WANTÔTOÔSELLÔMEÔAÔSTAN
                                  DINGED O'ER" : PRINT
 DARD WEAPON LIKE" :
                                  "A\BIT.\I\CAN\OFFER\O" ;P;
                                  "

GOLD

PIECES.'" : PRINT
  PRINT "I SELL? O (HITO'Y'
  \langle OR \langle N' \rangle \rangle \rangle \rangle \rangle \gamma ;
                                2381 PRINT "'TAKE OIT OR
2230 GET A$: IF A$ = "Y"
                                  ◊LEAVE◊IT.'" : PRINT :
  THEN 2350
                                  PRINT "(HIT\DiamondT\DiamondOR\DiamondL)\Diamond\Diamond";
2240 IF A$ < > "N" THEN
                                2390 GET A$: IF A$ < > "T"
  2003
                                  THEN 2003
2250 PRINT A$: PRINT :P =
                                2410 PRINT : GOTO 2300
                                2420 PRINT : FOR X = 1 TO
 INT (50 / RTIO + .5):
 PRINT "MARCOS SAYS, O'
                                  4: IF MID$ ( "ABMS"
                                  (X,1) = LEFT$ (W$,1)
 THENOIOCANOONLYOGIVEOYOU"
  : PRINT P; "OGOLDOPIECES
                                  THEN ON X GOTO
                                  2440,2450,2460,2470
 ◊FOR◊IT,◊TAKE◊IT◊OR" :
 PRINT "LEAVE OIT! '" :
                                2430 NEXT X
 PRINT : PRINT "(HITÔTÔ
                                2440 BP = 25: GOTO 2370
 OR\Diamond L) \Diamond \Diamond \Diamond ";
                                2450 BP = 40: GOTO 2370
                                2460 BP = 20: GOTO 2370
2260 GET A$: PRINT A$: IF
 A$ < > "T" THEN 2003
                                2470 \text{ if MID$} (W\$, 2, 1) =
```

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2490 A2 = INT (AC / 2):SH
   = AC - A2 * 2:B1 = 25 *
   (A2 = 1) + 60 * (A2 = 2)
   + 100 * (A2 = 3):TI =
   INT (B1 / RTIO + .5)
 2495 GOSUB 1990: PRINT
   ARMOUR SECTION" : PRINT
   "OF♦HIS♦SHOP♦AND♦SHOWS
   ◊YOU◊SUITS◊OF" : PRINT
   "LEATHER ◊ ARMOUR, ◊ CHAIN ◊
   ARMOUR, \( \dagger \text{AND} \rightarrow \text{PLATE."} :
   GOSUB 1998: IF TI > B1 *
   2 \text{ THEN TI} = B1 * 2
 2500 GOSUB 1990: PRINT
   "HE\SAYS, \O'I\CAN\PUT\YOU\
   IN ANY OF OTHESE" : PRINT
   "VERYOCHEAPLY. OOIONEEDO"
   ; FN P(100); "OGOLD" :
   PRINT "PIECES OF OR OTHE
   \DiamondLEATHER, \Diamond"; FN P(250);
   "ôFOR" : PRINT "THEôCHA
   IN, \Diamond AND \Diamond "; FN P(500);
   "◊FOR◊THE◊PLATE.": PRINT
 2510 IF TI THEN PRINT
   "ALSO, OIOCANOGIVEOYOUOAO
   TRADE-INOONOYOUR" :
   PRINT "OLD ARMOUR OF O"
   ;TI; "OGOLDOPIECES." :
   PRINT
 2520 PRINT "WELL, ♦ WHAT
   WILLOITOBE?'" : PRINT :
   PRINT "(HITOSPCOOROL,
   \langle C, \langle P \rangle \rangle;
 2530 GET A$: PRINT A$: FOR
   A = 1 TO 4: IF A$ < >
   MID$ ("NLCP", A, 1) THEN
   NEXT: ON 1 + (SH > 0)
   GOTO 2580,2003
 2540 PRINT : IF A = 1 THEN
   2570
 2550 P = FN P(100 * (A =
   2) + 250 * (A = 3) + 500
   * (A = 4)) - TI: IF P >
   GOLD THEN GOSUB 1990:
   PRINT "MARCOS ◊ FROWNS ◊
   WHEN OHE OSEES OTHAT OYOU ODO"
   : PRINT "NOTOHAVEOENOU
   GHTOTOOPAYOFOROYOUR" :
   PRINT "ARMOUR OAND OSAYS, O
   'IODON'TOGIVEOCREDIT!'"
   : PRINT : GOTO 2570
 2560 \text{ GOLD} = \text{GOLD} - P:A2 =
   A - 1:AC = A2 * 2 + SH:
   GOSUB 1990: PRINT "MARC
   OS OTAKES OYOUR OLD OARMOUR
   ♦AND♦YOUR": PRINT "GOLD
   ♦ AND ♦ HELPS ♦ YOU ♦ INTO ♦ YOUR
   ♦NEW": PRINT "ARMOUR."
 2570 GOSUB 1998: IF SH
   THEN 2003
 2580 GOSUB 1990: PRINT
   "MARCOS SMILES SAND SAYS,
   ◊'NOW◊HOW◊ABOUT" : PRINT
   ♦ ONE ♦ ONE ♦ ONE • PRINT
   "ONLY◊" ; FN P(50); "◊GO
   LDOPIECES! " : PRINT :
   PRINT "(HITOYOORON)";
 2590 GET A$: PRINT A$: IF
   A$ = "N" THEN PRINT : ON
   1 + INT (RND (1) * 1.9)
   GOTO 2289,2210
 2600 IF A$ < > "Y" THEN
  2003
2610 PRINT A$: PRINT : IF
   GOLD < FN P(50) THEN
   GOSUB 1990: PRINT "WHEN
   ♦ HAVE" : PRINT "ENOUGH♦
   GOLD ♦ TO ♦ BUY ♦ THE ♦ SHIELD, ♦
   MARCOS" : PRINT "FROWNS
   ◊AND◊SAYS,◊'I'M◊SORRY,◊
   BUTOI" : PRINT "DON'TO
   GIVE OCREDIT! " : PRINT :
   GOTO 2113
 2620 \text{ GOLD} = \text{GOLD} - \text{FN}
  P(50):SH = 1:AC = A2 * 2
   + SH: GOSUB 1990: PRINT
```

```
2660 GET A$: FOR W = 1 TO
                              4: IF A$ < > MID$ (
                              "ABMS" , W, 1) THEN NEXT
                              W: GOTO 2755
                            2670 ON W GOTO 2680,2690
                               ,2700,2710
"MARCOSOTAKESOYOUOTOOTHEO 2680 PRINT "AXE" :BP =
                              25:N$ = "AXE" :TP =
                              1:SIDE = 6: GOTO 2750
                            2690 PRINT "BOW" :BP =
                              40:N$ = "BOW" : TP =
                              2:SIDE = 6: GOTO 2750
                            2700 PRINT "MACE" :BP =
                              20:N$ = "MACE" : TP =
                              3:SIDE = 4: GOTO 2750
                            2710 PRINT A$;:
                            2720 GET A$: IF A$ = "P"
                              THEN PRINT "PEAR" :BP =
                              25:TP = 4:SIDE = 5:N$ =
                              "SPEAR" : GOTO 2750
                            2730 IF A$ < > "W" THEN
                              2755
                            2740 \text{ PRINT "WORD" :BP} =
                              50:N$ = "SWORD" :TP =
                              5:SIDE = 8
                            2750 \text{ DICE} = 1: RETURN
                            2755 A$ = "X" : PRINT A$:
                              RETURN
                            2760 END
                            3000 GOSUB 1970: GOTO 3005
                            3002 PRINT : GOSUB 1998
                            3003 GOSUB 1970: GOTO 3015
                            3005 PRINT "AFTER◊A◊FEW◊
                              MINUTES ODILIGENT OSEARCH
                              ING," : PRINT "YOU◊FIND◊
                              HOKAS ♦ TOKAS, ♦ THE ♦ OLD ♦
                              MAGE. OHE" : PRINT "LOOKS
                              ◊AT◊YOU◊AND◊SAYS, ◊'ŚO◊YOU
                              ♦ WANT♦ OLD": PRINT "TOK
                              EYOTOOTEACHOYOUOSOMEO
                              MAGIC, ♦HEH♦HEH?"
                            3010 PRINT "WELL, ◊IT'LL
                              ♦COST♦YOU.♦";
                            3015 PRINT "TODAY MY FEES
                              \DiamondARE:" :C2 = CH + INT
                              (11 * RND (1) - 5):C2 =
                              C2 + (C2 = 0) : RTIO = 10
                              / C2
                            3020 PRINT "◊◊◊BLAST◊◊";
                              FN P(3000); "GP" : PRINT
                              "\Diamond\Diamond\DiamondHEAL\Diamond\Diamond\Diamond"; FN P(1000)
                               "GP" : PRINT "◊◊◊SPEED
                              \Diamond \Diamond"; FN P(5000); "GP":
                              PRINT "◊◊◊POWER◊◊" ; FN
                              P(100); "GP" : PRINT
                            3030 PRINT "WELL, ♦WHICH♦
                              WILLOITOBE?'" : PRINT :
                              PRINT "(SPC◊TO◊LEAVE◊OR◊
                              PICK \Diamond B, \Diamond H, \Diamond S, \Diamond P) \Diamond ";
                            3040 GET A$: FOR SP = 1 TO
                              4: IF A$ < > MID$ (
                              "BHSP" , SP, 1) THEN NEXT
                              : PRINT : GOTO 3200
                            3050 ON SP GOTO 3060,3070
                              ,3080,3090
                            3060 A$ = "BLAST" : PRINT
                              A$:P = FN P(3000) : GOTO
                              3100
                            3070 A$ = "HEAL" : PRINT
                              A\$:P = FN P(1000) : GOTO
                              3100
                            3080 A$ = "SPEED" : PRINT
                              A$:P = FN P(5000): GOTO
                              3100
                            3090 A$ = "POWER" : PRINT
                              A$:P = FN P(100)
                            3100 PRINT : IF P > GOLD
                              THEN GOSUB 1970: PRINT
                              "WHENOHOKASOSEESOTHATO
                              YOUODON'TOHAVE" : PRINT
                              "ENOUGHOTOOPAYOHIM, OHEO
                              STALKSOTOOTHE" : PRINT
                              "BAR, ♦MUTTERING ♦ABOUT ♦
                              YOUNGSTERS WHO" : PRINT
                              "SHOULD ◊BE ◊TURNED ◊INTO ◊
                              FROGS." : GOTO 1999
                            3110 IF SA%(SP) < = 0 THEN
                              3120
                            3113 GOSUB 1970: PRINT
                              "HOKAS SAYS, O'I OUGHT O
                              TOOTAKEOYOUR" : PRINT
                              "GOLD♦ANYWAY,♦BUT♦HAVE
                              N'TÔYOUÔFORGOTTEN" :
                              PRINT "SOMETHING? $\dagger$ i$
                              ALREADY TAUGHT YOU A
                              . . . .
```

PRINT : INPUT

2280 PRINT : GOSUB 1990:

PRINT "MARCOS SAYS, O'OK

AY, OWHAT' VE OYOU OGOT?" :

2640 END

"P" THEN BP = 25: GOTO

2480 BP = 50: GOTO 2370

2370

"MARCOS TAKES YOUR GOLD O

AND GIVES YOU" : PRINT

"AOSHIELD." : GOTO 2003

2650 PRINT "(HITOTHEOKEY

(S), $\langle A \rangle B \rangle M \rangle SP \langle OR \rangle SW \rangle \rangle \rangle$ "

```
3114 IF CH > RND (1) * 28
  THEN 3002
3115 PRINT : PRINT "SHAK
  ING \lozenge HIS \lozenge HEAD \lozenge SADLY, \lozenge HE \lozenge
  RETURNS ◊ TO" : PRINT
  "THE $\rightarrow BAR." : GOTO 1999
3120 GOLD = GOLD -
  P:SA%(SP) = INT (50 *
  RND (1) + 26: GOSUB
  1970: PRINT "HOKAS TEACH
  ES \( YOU \( \) YOUR \( \) SPELL, \( \) TAKE
  S" : PRINT "HISÔFEE, ÔAND
  ♦ RETURNS • TO • HIS • STOOL •
  ON" : PRINT "THE BAR."
3125 PRINT "AS YOU WALK !
  AWAYÔYOUÔHEARÔHIM" :
  PRINT "ORDER ADOUBLE
  ODRAGONOBLOMB." : GOTO
  1999
3200 GOSUB 1970: PRINT
  "ASÔYOUÔLEAVE,ÔYOUÔHEARÔ
  HOKAS MUTTERING" : PRINT
  "ABOUT OCHEAP SKATE OAD VENT
  URERS ALWAYS" : PRINT
  "WANTING ♦ SOMETHING ♦ FOR
  ♦NOTHING. ": GOTO 1999
4000 GOSUB 1950: GOTO 4005
4002 PRINT : GOSUB 1998
4003 GOSUB 1950: GOTO 4015
4005 PRINT "YOU♦HAVE♦NO♦TR
  OUBLE SPOTTING SHYLOCK"
  : PRINT "MCFENNEY, OTHEO
  LOCAL BANKER, DUE TO HIS
  " :PRINT "LARGE BELLY."
4007 PRINT : PRINT "YOU◊
  ATTRACT OHIS OATTENTION
  , ♦ AND" : PRINT "HE ♦ COM
  ESOOVEROTOOYOUOANDOSAYS:"
  : PRINT
4010 PRINT NAME$ ", ÔMYÔDE
  ARO" ; MID$ ( "GIRLBOY"
  , (SEX$ = "M") * 4 +
  1,4); "," : PRINT "THIS
  ◊IS◊A◊GENUINE◊PLEASURE!"
4015 PRINT "DOOYOUOWISHOTO
  OMAKEOAODEPOSIT(!)OOR,"
  : PRINT "PERHAPS, OAOTINY
  ◇WITHDRAWAL?'◊(SPC/D/
  W) ◊";
4030 GET A$: PRINT A$: IF
  A$ = "D" THEN PRINT :
  GOTO 4090
4040 IF A$ < > "W" THEN
  100
4045 IF BANK < 1 THEN
 PRINT "HA! OGOOD OTRY, O"
  NAME$ "." : PRINT
  "UNFORTUNATELY, ◊YOUR
  ♦ACCOUNT" : PRINT
  "BALANCE OIS OZERO!" :
  GOTO 4002
4050 PRINT : PRINT
  "SHYLOCK\DiamondSAYS,\Diamond'WELL,\Diamond
  YOUOHAVEO" ; BANK: PRINT
  "GOLD OPIECES OSTORED O
  WITHOME. OHOWOMANYODO":
  \verb"INPUT "YOU \lozenge \texttt{WANT} \lozenge \texttt{TO} \lozenge
  TAKE ◊BACK? '◊>>◊"; A$
4053 IF A$ = "" THEN 4003
4055 \text{ MNY} = \text{ABS} ( INT ( VAL
  (A$))): IF MNY < = BANK
  THEN 4080
4070 GOSUB 1950: PRINT
 MNY; "!!!◊(GASP)" :
 PRINT : PRINT
  "THE BANKER THROWS YOU
 ◊A◊TERRIBLE◊GLANCE" :
 PRINT "AND SAYS, O'THAT'S 5020 PRINT : PRINT SPC (
 OMOREOTHANOYOU'VEOGOT!"
4075 IF CH > 28 * RND (1)
 THEN 4002
4078 PRINT "YOUOKNOWOIO
 DON'TOMAKEOLOANSOTO
 ◊YOUR" : PRINT "KIND!'◊◊ 5030 PRINT "YOUR◊WEAPON◊
 WITHOTHATOHEOLOSESOHIM
 SELF♦IN" : PRINT "THE♦
 CROWD." : GOTO 1999
4080 \text{ GOLD} = \text{GOLD} +
 MNY:BANK = BANK - MNY:
 GOSUB 1950: PRINT "THE
 BANKER HANDS YOU YOUR
 GOLD AND" : PRINT "SAYS,
 ◊'THAT◊LEAVES◊YOU◊WITH◊"
                                 PRINT : PRINT
```

```
"HAND OAND OWALKS OAWAY." :
    GOTO 1999
  4090 GOSUB 1950: PRINT
    "SHYLOCK OGETS OA OWIDE O
    GRINOONOHISOFACE" :
    PRINT "AND SAYS, S'EXCEL
    LENT! \( \text{\text{how}\text{\text{MUCH}\text{\text{DO}\text{\text{YOU}"}} \):
    INPUT "WANTOODEPOSIT?
    ¹◊>>◊" ;A$
  4095 IF A$ = "" THEN 4003
  4097 \text{ MNY} = \text{ABS} ( INT ( VAL
    (A$))): IF MNY < = GOLD
    THEN 4120
  4110 GOSUB 1950: PRINT
    "THE BANKER SIS VERY
    PLEASEDOWHENOYOU" :
    PRINT "TELL♦HIM♦THE♦SUM,
    ◊BUT◊WHEN♦HE♦DISCOVERS"
    : PRINT "THATOYOUODON'TO
    HAVE♦THAT♦MUCH♦ON♦YOU,"
  4112 IF CH > 28 * RND (1)
    OR GOLD > 2999 THEN
    PRINT "HE HELPFULLY
    SUGGESTS $\forall YOU \( \seta \) ETTLE \( \seta \) FOR"
    : PRINT "AO'MODEST'ODEP
    OSITOOFO"; GOLD; ".":
    GOTO 4002
  4113 PRINT "HE WALKS AWAY,
    ♦SHOUTING♦ABOUT♦FOOLS":
    PRINT "WHOOPLAYOTRICKSO
    ONO'KNIDLYOBANKERS'." :
    GOTO 1999
  4120 GOLD = GOLD - MNY:
    BANK = BANK + MNY: GOSUB
    1950: PRINT "SHYLOCKÔTAK
    ESOYOUROMONEY, OPUTSOIT
    ◊IN" : PRINT "HIS◊BAG,
    ♦LISTENS♦TO♦IT♦JINGLE,
    ♦THEN" : PRINT "THANKS
    ◊YOU◊AND◊WALKS◊AWAY." :
    GOTO 1999
  5000 GOSUB 5004: GOSUB
    5010: GOSUB 5030
  5002 VTAB 23: POKE -
    16368,0: PRINT "(HITOANY
    \langle KEY \rangle TO \langle CONTINUE \rangle \langle V \rangle;
    GET A$: PRINT : GOTO 100
 5004 Q$ = "MIGHTY$\rightarrow$ : IF
    SEX$ = "F" THEN Q$ =
    "FAIR◊"
 5005 HOME :Q$ = "THE\Diamond" +
    Q$ + NAME$:I = INT ((32)
    - LEN (Q$)) / 2): HTAB
    I: PRINT Q$; SPC( I);
    "LVL\Diamond"; XL: FOR I = 1 TO
    39: PRINT "_" ;: NEXT I:
   PRINT
 5007 PRINT "EXPERIENCE:◊"
    ;XE;: HTAB 20 + (XE >
    99999): PRINT "ADVENT
   URES: ♦" ; XN: PRINT "ATTR
   IBUTES: \DiamondHD="; HD; "\Diamond\DiamondAG="
    ;AG; "\Diamond \Diamond CH = "; CH: PRINT
 5008 PRINT "GOLD IN HAND="
    ;GOLD; ", ♦BANK=" ;BANK:
   PRINT
 5009 RETURN
 5010 PRINT "MAGIC ♦ SKILLS:
   \lozenge" ; : SM = 0
 5015 \text{ FOR S} = 1 \text{ TO } 4: \text{ IF}
   SA%(S) THEN PRINT MID$ (
    "BLASTHEAL SPEEDPOWER"
   ,(S-1)*5+1,5); "\Diamond"
   ; : SM = 1
 5017 NEXT S: IF NOT SM
  THEN PRINT "OZILCH!" :
  PRINT: GOTO 5025
  12);: FOR S = 1 TO 4: IF
   SA%(S) THEN PRINT SPC(
   3); SA% (S); "%";
 5025 RETURN
  ABILITIES ARE -- " : PRINT PRINT "'COME BACK
"◊◊AXE◊◊◊BOW◊◊◊CLUB◊
   ♦SPEAR♦SWORD"
5035 FOR I = 1 TO 5: PRINT ITEM? \lozenge"; Q$: GOSUB
   SPC(1+(I = 3)-(WA%(I) < 1947:ZX = I: IF Q$ = ""
   0) + (ABS (WA%(I)) < 10)
```

```
+ 1,7): FOR I = 1 TO 7:
                                 IF MID$ (Q\$,I,1) < > "\lozenge"
                                 THEN NEXT I
                               5043 Q$ = LEFT$ (Q$, I - 1)
                               5045 PRINT "ARMOUR: ◊" Q$;:
                                 IF AC > A2 * 2 THEN SH =
                                 1: PRINT "O&OSHIELD";
                               5050 PRINT TAB ( 26); "AE="
                                 ;AE; "%\AC=" ;AC: PRINT
                               5060 PRINT "WEAPONS"; TAB(
                                 23); "COMPLEX◊◊DAMAGE"
                               5080 FOR I = 1 TO 4:Q =
                                 ABS (WO%(I)): PRINT
                                 WN$(I); HTAB (24 -
                                 (WO%(I) < 0) + (Q < 10)
                                 + (Q < 100)): PRINT
                                 WO%(I); "%OOO(I); WD%(I);
                                 "ÔDÔ" ; WS%(I): NEXT I
                               5095 RETURN
                               5499 REM ///LOCKERS
                               5500 GOSUB 1940: GOTO 5505
                               5502 GOSUB 1998
                               5503 GOSUB 1940: GOTO 5515
                               5505 PRINT "THE ♦ LOCKER ♦
                                 ATTENDANT OGREETS OYOU: ◊
                                 'GOOD" : PRINT "AFTER
                                 NOON, ◊" NAME$ "!'" : IF
                                 LQ THEN 5514
                               5506 IF XL > 6 AND GOLD >
                                 6999 THEN 5511
                               5507 PRINT : PRINT "'COME
                                 ◊BACK◊AS◊SOON◊AS◊YOU"
                               5508 \text{ if } XL > 6 \text{ THEN } 5510
                               5509 PRINT "REACH LEVEL 07.
                                 OREMEMBER, OTHE OPRICE OIS"
                                 : PRINT "JUST 07000 GOLD 0
                                 FOR A ROOMY LOCKER! " :
                                 GOTO 1999
                               5510 IF GOLD < 7000 THEN
                                 PRINT "HAVE ♦ THE ♦ 7000 ♦
                                 GOLDOTOOPURCHASE" :
                                 PRINT"YOUR OWN LOCKER. '"
                                 : GOTO 1999
                               5511 PRINT : PRINT "ARE◊
                                 YOU\READY\TO\BUY\A\
                                 SPACE? (Y/N) "; GET
                                 Q$: PRINT Q$: IF Q$ < >
                                 "Y" THEN 1999
                               5513 PRINT : PRINT
                                 "'EXCELLENT! O" ;:GOLD =
                                 GOLD - 7000: FOR I = 1
                                 TO 8:LN$(I) = "NONE" :
                                 NEXT I:LQ = 1: PRINT
                                 "YOUR OLOCKER OIS OREADY. '"
                               5514 PRINT "YOU♦SMILE,♦
                                 PICKOUPOYOUROKEY," :
                                 PRINT "AND OGO OTO OVOUR O
                                 LOCKER.": GOTO 5502
                               5515 PRINT "DO VOU STORE ◊
                                 ANOITEMOORORETRIEVE
                                 ONE?" : PRINT "O(SPC
                                 \Diamond TO \Diamond EXIT \Diamond OR \Diamond S, \Diamond R) \Diamond ";
                                 GET A$: PRINT A$: GOSUB
                                 1940: IF A$ < > "S" THEN
                                 5540
                               5525 INPUT "STORE ♦ WHICH
                                 ◊ITEM?◊" ;Q$: GOSUB
                                 1945:ZW = I: IF Q$ = ""
                                 OR Q$ = "NONE" THEN 5503
                               5527 IF ZW < 5 THEN 5533
                               5530 GOSUB 1940: PRINT
                                 "YOUOHAVEONOO'" Q$ "'!"
                                : GOTO 5502
                              5533 Q$ = "NONE" : GOSUB
                               1947:ZX = I: IF ZX < 9
                                THEN 5550
                              5535 INPUT "SWAPOFORO
                               WHAT¢ITEM?◊";Q$: GOSUB
                             1947:ZX = I: IF ZX < 9
                                THEN 5550
                              5537 GOSUB 1940: PRINT
5022 NEXT S: PRINT : PRINT "NO^{\circ}" Q$ "'^{\circ}IS^{\circ}IN^{\circ}STOR 8010 IF F$ < > "^{\circ}C^{\circ}MA"
                                AGE!" : GOTO 5502
                              5540 IF A$ < > "R" THEN
                               ANYTIME!'" : GOTO 1999
                                                              NAME)
                             5542 INPUT "GET WHICH V
                               OR Q$ = "NONE" THEN 5503
                                                              8130
 + (ABS (WA%(I)) < 100)) 5543 IF ZX > 8 THEN 5537 8110 IF LEFT$ (F$,4) =
; WA*(I); "*0";: NEXT I: 5545 Q$ = "NONE" : GOSUB
                              1945:ZW = I: IF ZW < 5
                                THEN 5550
 = MID$ ( "SKIN\Diamond\Diamond\Diamond\DiamondLEATHER 5547 INPUT "SWAP\DiamondFOR\Diamond
                                                          TO L9
                               WHAT♦ITEM?♦" ;Q$: GOSUB
```

```
1945:ZW = I: IF ZW > 4
    THEN 5530
  5550 \text{ LN}\$(0) = \text{WN}\$(ZW) : \text{LT}\$
    (0) = WT%(ZW) : LO%(0) =
    WO%(ZW): LD%(0) = WD%
    (ZW):LS%(0) = WS%(ZW)
  5552 \text{ WN}\$(ZW) = LN\$(ZX):
    WT%(ZW) = LT%(ZX): WO%
    (ZW) = LO^*(ZX) : WD^*(ZW)
    = LD%(ZX): WS%(ZW) =
    LS% (ZX)
  5555 \text{ LN}$(ZX) = \text{LN}$(0):LT$
    (ZX) = LT%(0):LO%(ZX) =
    LO^*(0):LD^*(ZX) = LD^*(0)
    :LS%(ZX) = LS%(0)
  5557 IF WN$(ZW) = "NONE"
    THEN GOSUB 1920: GOTO
    5580
  5559 QS = WNS(ZW)
  5560 \text{ FOR I} = 1 \text{ TO } 4: \text{ IF I}
    = ZW THEN 5570
  5565 IF Q$ < > WN$(I) THEN
    5570
  5567 IF RIGHT$ (Q$,1) =
    "#" THEN Q$ = LEFT$ (Q$,
    LEN (Q\$) - 1) + CHR\$ (65)
    + INT ( RND (1) * 25)):
    GOTO 5560
  5568 Q$ = Q$ + "#" : GOTO
    5560
  5570 \text{ NEXT I:WN} (ZW) = Q$
  5580 \text{ IF LN} (ZX) = "NONE"
    THEN 5503
  5583 Q$ = LN$(ZX)
  5585 \text{ FOR I} = 1 \text{ TO } 8: \text{ IF I}
   = ZX THEN 5595
  5587 IF Q$ < > LN$(I) THEN
   5595
  5590 \text{ IF RIGHT$} (Q\$,1) =
    "#" THEN Q$ = LEFT$ (Q$,
   LEN (Q\$) - 1) + CHR\$ (65
    + INT ( RND (1) * 25)):
   GOTO 5585
  5592 Q$ = Q$ + "#" : GOTO
   5585
  5595 \text{ NEXT I:LN$(ZX)} = Q$:
   GOTO 5503
  6000 HOME : VTAB 11
  6007 PRINT "AS$YOU$LEAVE$
   THE OHALL, OTHE OIRISHMAN"
    : PRINT "COMESQUPQTOQYOU
    , ♦SLAPS♦YOU♦ON♦THE♦BACK"
    :PRINT "AND SAYS, S'Y'ALL
   ♦COME♦BACK♦REAL♦SOON,":
   PRINT "YAOHEAH?'"
  6010 PRINT DK$; "OPEN♦CHAR
   ACTERS, L150" : PRINT DK$;
    "WRITE CHARACTERS, R"
   ; REC : GOSUB 200: PRINT
   DK$; "CLOSE"
  6015 GOSUB 300
  6020 PRINT DK$; "DELETE◊
   THE ADVENTURER"
 6030 END
 7000 PRINT DK$ "CLOSE" :
   PRINT "EXITOONO"; PEEK
   (222); "◊@◊" ; PEEK
   (218) + 256 * PEEK
   (219); "."
 7017 IF PEEK (222) < > 5
   THEN PRINT : PRINT
   "KEY$>>$" ;: GET Q$:
   PRINT QŞ
 7019 PRINT CHR$ (4); "RUN◊
   THE \ WONDERFUL \ WORLD \ OF
   ♦EAMON"
 7020 END
8000 Q9 = 0:F$ = "" : FOR
I = 4 \text{ TO } 8:F\$ = F\$ +
   CHR$ ( PEEK (512 + I) -
  128): NEXT I
  THEN Q9 = 1
 8090 RETURN
8099 REM START ADV (SAVE
8100 L = 43382: POKE L -
  1,40:F$ = ADNAME$:L9 =
  LEN (F\$): IF L9 < 7 THEN
  "THE\Diamond" THEN L9 = L9 -
   4:F$ = RIGHT$ (F$, L9)
 8130 POKE L, L9: FOR I = 1
                  COMPUTIST #89
```

MYOCARE. 'OOHEOSHAKES

♦YOUR" : PRINT

; BANK: PRINT "PIECES \Diamond IN \Diamond 5040 A2 = INT (AC / 2):Q\$

CHAIN $\Diamond \Diamond$ PLATE $\Diamond \Diamond$ ", A2 * 7

Hail and well met, Eamon adventurer.

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Tom Zuchowski is the editor and driving force behind it. The newsletter is printed on 8.5" x 11" bond, double sided with dot matrix type. It is non-profit (it's his hobby) and Tom's avowed purpose is to maintain a single point collection and clearing house for Eamon Adventures. He also intends to fix all known bugs in these adventures.

This is a grand concept worthy of support. We highly recommend that you subscribe. This newsletter will help you keep in touch with other Eamon adventurers. But more important, it will improve the state of Eamon adventures and encourage new adventures to be written. Tom has accomplished a great deal along these lines already, not only fixing bugs but also improving the Eamon Main program and authoring the version 7.0 Dungeon Designer Disk.

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☐ 10 The Magic Kingdom	□ 85 The Time Portal	☐ 152 The Computer Club of Fear	□ 200 The Lost Isle□ 201 The Caverns of Vanavara
☐ 11 The Tomb of Molinar☐ 12 The Quest for Trezore	☐ 86 Castle Mantru ☐ 87 Caves of Hollow Mountain	☐ 153 Lost!☐ 154 A Trip to Fort Scott	202 The Plain of Srevi
☐ 13 Caves of Treasure Island	☐ 88 The Shopping Mall	☐ 155 Tomb of the Vampire	□ 203 Lotto's Masterpiece
☐ 14 Furioso	☐ 89 Super Fortress of Lin Wang	☐ 156 The Lake	☐ 204A Sanctuary
☐ 15 Heroes Castle	☐ 90 The Doomsday Clock	☐ 157 Pathetic Hideout of Mr R.	☐ 204B Sanctuary
☐ 16 The Caves of Mondamen	☐ 91 FutureQuest II	☐ 158 The Lair of Mr Ed	□ 205 Utterly Outrageous□ 206 Curse of the Hellsblade
☐ 17 Merlin's Castle ☐ 18 Hogarth Castle	☐ 92 The Fugitive ☐ 93 Flying Circus	 ☐ 159 The Bridge of Catzad-Dum ☐ 160 Monty Python & Holy Grail 	☐ 207 Eamon Renegade Club
☐ 19 Death Trap	□ 94 Blood Feud	☐ 161A Operation Endgame	☐ 208 Assualt on Helstar
☐ 20 The Black Death	☐ 95 The Maze of Quasequeton	☐ 161B Operation Endgame	☐ 209 Apocalypse 2021
☐ 21 The Quest for Marron	96 The Chamber of the Dragons	☐ 161C Operation Endgame	□ 210 Return of Ngurct
☐ 22 The Senator's Chambers	☐ 97 The House of Secrets	☐ 162 Earmon 7.0 Demo Adventure	□ 211 Lair of the Marauders□ 212 Haunted Keep
☐ 23 The Temple of Ngurct☐ 24 Black Mountain☐	 ☐ 98 Slave Pits of Kzorland ☐ 99 In the Clutches of Torrik 	☐ 163 The Sands of Mars☐ 164 A Real Cliffhanger	☐ 212 Haunted Keep
■ 24 Black Mountain ■ 25 Nuclear Nightmare	☐ 100 Sorceror's Spire	☐ 165A Animal Farm	214 Deathstalker's Castle
☐ 26 Assault on the Mole Man	□ 101 Ground Zero	☐ 165B Animal Farm	☐ 215 Treasure Island
☐ 27 Revenge of the Mole Man	☐ 102 The Eamon Railroad	☐ 166A Storm Breaker	☐ 216 The Pirates Cave
☐ 28 The Tower of London	☐ 103 Top Secret	☐ 166B Storm Breaker	☐ 217 Eye of Agamon ☐ 218 Return to Pendrama
29 The Lost Island of Apple	□ 104 The Lost World□ 105 The Strange Resort	☐ 166C Storm Breaker ☐ 167 Expedition to the Darkwoods	☐ 219 The City of Sorcerors
☐ 30 The Underground City ☐ 31 The Gauntlet	☐ 105 The Strange Resort	☐ 168 The High School of Horrors	220 Catacombs of Terror
☐ 32 House of Ill Repute	☐ 107 The Last Dragon	☐ 169 The Black Phoenix	☐ 221 Count Dracula's Castle
☐ 33 The Orb of Polaris	☐ 108 The Mines of Moria	☐ 170 Ragnarok Revisited	☐ 222 The Halls of the Adept
☐ 34 Death's Gateway	☐ 109 The Forest of Fear	☐ 171 The Pyramid of Cheops	☐ 223 Time Shift
□ 35 The Lair of Mutants	110 Fire Island	 □ 172 The Mountain of the Master □ 173 The House that Jack Built 	☐ Dungeon Designer Diskette v7.0
☐ 36 The Citadel of Blood☐☐ 37 Quest for the Holy Grail☐	☐ 111 A Vacation in Europe ☐ 112 Hills of History	☐ 173 The House that Jack Built	☐ Multi-Disk Supplement (DDD7.0)
□ 38 City in the Clouds	☐ 112 This of History	☐ 175 Anatomy of the Body	☐ Eamon Utilities Diskette
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Checksums

```
0-$92CC
           16-$38F1
                        50-$14B5
                        60-$D925
1-$DB99
           17-$C92D
2-$9F59
            20-$3B18
                        70-$E13E
                        73-$B3D0
3-$7A8F
            30-$24AD
                        75-$6D88
4-$C15F
            35-$1F66
5-$8CAA
            37-$678F
                        77-$9353
                        80-$3CDA
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            38-$656C
           40-$E6B4
                        90-$3B3C
8-$142B
                       100-$2227
9-$C02D
           42-$B354
            49-$6769
                       102-$39C8
10-$7A8F
```

EXP.UPDATE

10 REM EXP. UPDATE 9/92: CALC/RECORD EXPERIENCE & LEVEL AFTER AN ADVENTURE 20 REM BY JEFF HURLBURT (COMPUTIST MAGAZINE) 713-645-8680 100 DIM E\$ (300), N% (300), P(8) 110 DIM TA% (4), XA% (5), XNA ME\$(4),XTYPE&(4),XODDS&(4), XDICE%(4), XSIDES%(4) 120 DIM SA% (4), WA% (5), WNA ME\$(4), WTYPE%(4), WODDS% (4), WDICE% (4), WSIDES% (4) 130 PRINT : DK\$ = CHR\$ (4)140 PRINT DK\$ "OPENOTHE **♦ ADVENTURER"** : PRINT DK\$ "READ OTHE OAD VENTURER" : INPUT NA\$: INPUT REC: PRINT DK\$ "CLOSE" 150 Q\$ = NA\$ + ".PRE" : PRINT DK\$ "OPEN" Q\$: PRINT DK\$ "READ" Q\$: INPUT NA\$: INPUT HV, AV, CV: FOR I = 1 TO 4: INPUT TA%(I): NEXT I: FOR I = 1 TO 5: INPUT XA%(I): NEXT I: INPUT 160 INPUT SEX\$ 170 INPUT OGOLD, BANK:

INPUT OAC: FOR I = 1 TO 4: INPUT XN\$(I), XT%(I), XO%(I),XD%(I),XS%(I): NEXT I: PRINT DK\$ "CLOSE" : PRINT DK\$ "DELETE" Q\$ 180 PRINT DK\$ "OPEN♦CHAR ACTERS, L150" : PRINT DK\$ "READ OCHARACTERS, R" ; REC : INPUT NA\$: INPUT HD, AG ,CH: FOR I = 1 TO 4:

INPUT SA%(I): NEXT I: FOR I = 1 TO 5: INPUT WA% (I): NEXT I: INPUT AE 190 INPUT SEX\$ 200 INPUT GOLD, BANK: INPUT AC: FOR I = 1 TO 4: INPUT WN\$(I), WT*(I), WO* (I), WD%(I), WS%(I): NEXT I: PRINT DK\$ "CLOSE" 210 REM (GET ADV NAME) 220 L = 43382: IF PEEK (L -1) = 40 THEN 270

230 HOME: VTAB 5: PRINT "THE SECRETARY OF SHALLS RECORDS LOOKS" : PRINT "ATOYOUROPRINTOUTOANDO SIGHS. O'FOR OSOME" 240 PRINT "REASON, '♦SHE♦

SAYS, O'THEONAMEOOFOYOUR" : PRINT "LATESTOOUESTO WAS♦NOT♦SENT♦IN.'"

250 PRINT : PRINT "<PLEASE **♦ RE-INSERT♦ ADVENTURE** DISKETTE>◊" ;: GET Q\$: PRINT

252 ONERR GOTO 267 260 PRINT DK\$ "UNLOCK◊

EAMON.NAME" : PRINT DK\$ "OPEN EAMON . NAME" : PRINT DK\$ "READ EAMON .NAME" : INPUT F\$: PRINT DK\$ "CLOSE"

262 IF LEFT\$ (F\$, 4) ="THEO" THEN F\$ = RIGHT\$ (F\$, LEN (F\$) - 4)

```
263 PRINT : PRINT "'AH!◊
  HERE◊IT◊IS.'" : PRINT
265 GOTO 268
267 PRINT DK$ "CLOSE" :
  HOME : VTAB 5: PRINT
  "'HMMMMM...ONOOHELPOTHE
  RE. OI'LL OJUST" : PRINT
  "CALLOIT: OADVENTURE X! '"
  : F$ = "ADVENTURE\DiamondX"
268 PRINT : PRINT "<PLEASE
  ◊INSERT◊MAIN◊HALL◊DISK
  ETTE>O" ;: GET Q$: PRINT
  : GOTO 290
270 L9 = PEEK (L):F$ = ""
  : FOR I = 1 TO L9:F$ =
  F$ + CHR$ ( PEEK (L +
280 NEXT I: POKE L - 1,32
290 POKE 216,0:Z$ = NA$ +
  ".EXP"
300 ONERR GOTO 520
310 PRINT DK$ "UNLOCK" Z$
320 PRINT DK$ "OPEN" Z$
330 PRINT DK$ "READ" Z$
340 FOR I = 0 TO 8: INPUT
  P(I): NEXT I
350 FOR I = 1 TO P(0):
  INPUT E$(I),N%(I): NEXT
360 PRINT DK$ "CLOSE" :
  POKE 216,0
370 FOR I = 1 TO P(0): IF
  E$(I) < > F$ THEN NEXT
  I: GOTO 390
380 N%(I) = N%(I) + 1:
  GOTO 410
390 IF I > 300 THEN I =
  300
400 N%(I) = 1:E$(I) =
  F\$:P(0) = I
410 POKE 216,0:NZ = N%(I):
  GOSUB 540: GOSUB 670:
  GOSUB 910
420 PRINT DK$ "OPEN" Z$:
  PRINT DK$ "WRITE" Z$
430 FOR I = 0 TO 8: PRINT
  P(I): NEXT I
440 FOR I = 1 TO P(0):
  PRINT E$(I): PRINT
  N%(I): NEXT I
450 PRINT DK$ "CLOSE"
460 HOME : PRINT "ADVENT
  URESÔOFÔ" NA$: PRINT
470 PRINT "LEVEL: ◊" ;P(2);
  "\Diamond\Diamond\Diamond\Diamond\DiamondEXPERIENCE:\Diamond"; P(1):
  FOR I = 1 TO 39: PRINT
  " " ;: NEXT I: PRINT
480 POKE 34,4: VTAB 5
490 FOR I = 1 TO P(0):
  PRINT E$(I); SPC( 31 -
  LEN (E$(I)));N%(I);
  LEFT$ ( "OTIMES" ,6 -
  (N%(I) = 1)): NEXT I
500 POKE 34,0: PRINT :
  PRINT "ANY\DiamondKEY\Diamond>>\Diamond" ;:
  GET Q$: PRINT : PRINT
  DK$ "RUNOOOMAINOHALL"
510 END
520 P(0) = 1:E$(1) =
```

F\$:N%(1) = 1:I = 1: GOTO410 530 REM ... CHANGE FILTER 540 PRINT : L = 0 : Q = HD -HV:J = 5 - 3 * (HV > 13)- (HV > 25): IF ABS (Q) > J THEN HD = HV + J *

SGN (Q): GOSUB 640 550 Q = AG - AV:J = 5 - 3IF ABS (Q) > J THEN AG = AV + J * SGN (Q) : GOSUB640

560 Q = CH - CV:J = 5 - 3 \star (CV > 13) - (CV > 25): IF ABS (Q) > J THEN CH = 970 I = I + 100:Q = INT (LCV + J * SGN (Q) : GOSUB640

570 FOR I = 1 TO 4:Q =SA%(I) - TA%(I):J = 11 - 980 J = J + L * I:L = 184 * (TA%(I) > 25) - 3 *(TA%(I) > 50) - 2.*(TA%(I) > 80): IF ABS (Q) > J THEN SA%(I) =TA%(I) + J * SGN(Q): GOSUB 640

580 NEXT I

590 FOR I = 1 TO 5:Q =WA%(I) - XA%(I):J = 15 -5 * (XA%(I) > 25) - 4 *(XA%(I) > 50) - 3 *(XA%(I) > 80): IF ABS(Q) > J THEN WA% (I) =XA%(I) + J * SGN(Q):GOSUB 640 600 NEXT I 610 Q = AE - VAE:J = 20 -10 * (VAE > 30) - 5 * (VAE > 50) - 3 * (VAE > 75): IF ABS (Q) > J THEN AE = VAE + J * SGN (Q): GOSUB 640 620 L9 = L: IF L THENPRINT : PRINT 630 RETURN 640 L = L + 1: PRINT "*" CHR\$ (48 + L) "\0" ;: RETURN 650 REM ...CALC EXPERIENCE 660 REM GOLD DIF 670 DG = GO - OG: IF DG <0 THEN DG = 1680 IF DG = 0 THEN 720690 Q = 0: IF DG > 100000THEN Q = INT (DG -100000) / 100000): IF Q > 9 THEN Q = 9 700 DG = Q + INT (DG /200): IF DG < 1 THEN DG = 1 710 REM WEAP DIF 720 DW = 0: FOR I = 1 TO 4 1130 VTAB X: HTAB 25: 730 IF WN\$(I) < > XN\$(I)OR WT $\{(I) < > XT\{(I) \cap A\}$ WO%(I) < > XO%(I) ORWS*(I) < > XS*(I) THEN DW = 1: GOTO 760740 NEXT I: GOTO 800 750 REM BETTER WEAP 760 BW = 0: FOR I = 1 TO 4 770 FOR J = 1 TO 4: IF (WO%(I) > XO%(J)) OR (WD%(I) + WS%(I) >XD%(J) + XS%(J)) THEN NEXT J:BW = BW + 1780 NEXT I 790 REM ATTRIB DIF 800 DA = (HV < > HD) + (AV 1170 PRINT GOLD: PRINT< > AG) + (CV < > CH) 810 REM SPELL DIF 820 DS = 0: FOR I = 1 TO 4:DS = DS + (SA%(I) < >TA% (I)): NEXT I 830 REM WEAPSKILL DIF 840 DF = 0: FOR I = 1 TO 5:DF = DF + ABS (WA%(I))- XA% (I)): NEXT I 850 REM ARMOR DIF 860 DZ = ABS (AC - OA) +ABS (AE - VA) 870 QE = (DA * 50) + (DZ *11) +(DW * 3) +(BW * 25)+(DS * 33) + (DF * 7)880 OE = OE + $3 \times INT$ (DG / NZ) + (DG > 0)890 RETURN 900 REM ...LEVEL ADVANCE 910 W = P(2) : QE = P(1) +QE:J = QE920 I = 0:L = 0/ I): IF Q > = 16 THEN L = L + 16:J = J - (I *16): GOTO 930 * (AV > 13) - (AV > 25): 940 L = L + Q: IF L - W < 3 THEN 1010

950 REM (ADJUST OVER-EXP) 960 PRINT : PRINT "*" ; QE; 0:L = W + 2/ 16): IF Q > = 1 THEN J = J + 16 * I:L = L - 16:GOTO 970 990 Q = (QE - J) / L: PRINT "*" ;: IF Q > I / 2 THEN L = L + L: GOTO 1000 QE = J + INT (Q + Q /3):L = W + 21010 P(1) = QE:P(2) = L

1020 PRINT : PRINT 1030 IF P(2) > W THEN 1060 1040 IF L9 > 0 THEN 1150 1050 GOTO 1180 1060 HOME : PRINT NA\$ "OADVANCESOAOLEVEL!!" : PRINT CHR\$ (7): PRINT : PRINT "O<KEY>O" ;: GET Q\$: PRINT 1070 HOME : RESTORE 1080 PRINT "[A] OHARDINESS" ;: HTAB 17: PRINT HD: PRINT "[B] AGILITY" ;: HTAB 17: PRINT AG: PRINT "[C] OCHARISMA" ; : HTAB 17: PRINT CH 1090 FOR I = 1 TO 5: READ Q\$: PRINT "[" ; CHR\$ (67 + I); "]◊" ;Q\$;: HTAB 17: PRINT SPC(WA%(I) < 10 AND WA%(I) > -1); WA% (I): NEXT I 1100 FOR I = 1 TO 4: READ Q\$: PRINT "[" ; CHR\$ (72 + I); "]◊" ;Q\$;: HTAB 17: PRINT SPC(SA*(I) < 10); SA% (I): NEXT I 1110 PRINT : VTAB 16: PRINT "SELECTÔATTRIBUTE OROSKILLOTOOENHANCE: O" ;: GET Q\$: PRINT Q\$: GOSUB 2000 1120 PRINT : IF Q = 99THEN 1070 PRINT I; " $\Diamond << \Diamond DONE \Diamond$ " ;: GET Q\$: VTAB 16: HTAB 1: PRINT : PRINT 1140 W = W + 1: IF P(2) >W THEN 1060 1150 PRINT DK\$ "OPENÔCHAR ACTERS, L150" : PRINT DK\$ "WRITE CHARACTERS, R" ; REC 1160 PRINT NA\$: PRINT HD: PRINT AG: PRINT CH: FOR I = 1 TO 4: PRINT SA%(I): NEXT I: FOR I =1 TO 5: PRINT WA% (I): NEXT I: PRINT AE: PRINT SEX\$ BANK: PRINT AC: FOR I = 1 TO 4: PRINT WN\$(I): PRINT WT% (I): PRINT WO%(I): PRINT WD%(I): PRINT WS%(I): NEXT I: PRINT DK\$ "CLOSE" 1180 RETURN 2000 Q = ASC (Q\$) - 64: IF Q < 1 OR Q > 12 THEN2120 2010 X = Q: ON Q GOTO 2020, 2030, 2040, 2050, 2050 ,2050,2050,2050,2080, 2080,2080,2080 2020 HD = HD + 1:I = HD:RETURN 2030 AG = AG + 1:I = AG:RETURN 2040 CH = CH + 1:I = CH:2050 Q = Q - 3: IF WA%(Q)> = 100 THEN 2110930 I = I + 100:Q = INT (J 2060 WA% (Q) = WA% (Q) + 3 -(WA%(Q) > 66) * 2 + INT(RND (1) * 3): IF WA%(Q) > 100 THEN WA%(Q)= 1002070 I = WA%(Q): RETURN 2080 Q = Q - 8: IF SA%(Q) $< 1 \text{ OR SA}^*(Q) > 99 \text{ THEN}$ 2110 2090 SA (Q) = SA (Q) + 4 +INT (RND (1) * 4): IF SA%(Q) > 100 THEN SA%(Q)= 1002100 I = SA%(Q): RETURN **2110 PRINT** "NOT \Diamond ALLOWED! $\Diamond \gt\gt\Diamond$ " ;: GET Q\$: PRINT 2120 Q = 99: RETURN 2130 DATA AXE, BOW, CLUB, SPEAR, SWORD, BLAST, HEAL, SPEED, POWER

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10-\$BADD	460-\$B08D	900-\$A429
20-\$9B13	470-\$BCD7	910-\$5120
100-\$54E7	480-\$A21E	920-\$93AC
110-\$9D2C	490-\$0DE9	930-\$0C4C
120-\$D711	500-\$B016	940-\$2 AA F
130-\$6820	510-\$B49E	950-\$2E31
140-\$7108	520-\$6BB4	960-\$85E5
150-\$0329	530-\$C359	970 - \$71F6
160-\$0514	540-\$6C0F	980-\$EE7F
170 - \$15A9	550-\$8A6A	990-\$3845
180-\$5F2D	560 - \$953F	1000-\$A42B
190-\$C13F	570-\$4795	1010-\$1EC7
200-\$AC6E	580-\$0D4A	1020-\$4D9B
210-\$4CD4	590 - \$E98B	1030-\$A373
220-\$7959	600-\$DD2C	1040-\$ABCA
230-\$191B	610 - \$3E28	1050-\$3E10
240-\$93E6	620-\$DC4B	1060-\$605C
250-\$2BD0	630-\$EBB7	1070-\$5223
252-\$702A	640-\$B365	1080-\$A2C3
260-\$A1BA	650-\$F63F	1090-\$D7A5
262-\$2BDF	660-\$94E9	1100-\$7EA0
263-\$BA40	670-\$0B87	1110-\$BCF0
265 - \$B71B	680-\$EABF	1120-\$52ED
267 - \$567A	690-\$7172	1130-\$2EDC
268-\$3E10	700-\$09A3	1140-\$7512
270-\$AF5B	710-\$C85F	1150-\$B2DB
280-\$6454	720-\$4F50	1160-\$FBCC
290-\$5C0C	730-\$64E0	1170-\$0B50
300-\$DE22	740-\$F0EA	1180-\$83AD
310-\$FD8F	750-\$CD94	2000-\$C1AB
320-\$0FA8	760-\$9262	2010-\$5644
330-\$EAF2	770-\$047C	2020-\$DD92
340-\$5DA7	780-\$CB3D	2030-\$0163
350-\$5FFF	790-\$7C60	2040-\$B538
360-\$56EE	800-\$8585	2050-\$E592
370-\$901A	810-\$A400	2060-\$2499
380-\$FAAC	820-\$59CE	2070-\$B277
390-\$F7D4	830-\$7318	2080-\$5040
400-\$BD6C	840-\$139F	2090-\$6904
410-\$F1FA	850-\$8636	2100-\$D4AE
420-\$87AD	860-\$C8EF	2110-\$FFFE
430-\$8D37	870-\$1853	2120-\$683E
440-\$3B25	880-\$21FD	2130-\$6A9E
450-\$3DC9	890-\$5FCD	
NIT	EDIT 709	

NUEDIT.792

- 0 REM NUEDIT.792 IS AN EDITOR FOR "NEW FORMAT" EAMON GAME MOD & DESIGN 9/5/92
- 1 REM BY JEFF HURLBURT (USES MOD OF DON BROWN ROUTINE @ LINES 280-310)
- 2 PRINT CHR\$(4) "MAXFILES \$ 5"
- 3 D\$ = CHR\$ (4) : RE\$ = CHR\$(4) +"READ ◊EAMON.DESC, R" :WE\$ = CHR\$ (4) + "WRITE \Diamond EAMON.DESC,R":0E\$=CHR\$ (4) + "OPENÔEAMON." :CC\$ = CHR\$ (4) + "CLOSE" :NX = 200:NF = 7:MF = 4:TZ =
- 4 DIM N% (NF), DR% (11), D\$ (11),M\$(10),M\$(10),TY\$ (TZ), TF(TZ), LO\$(6), AF\$ (FM, 4), WT\$ (1, 6), R* (11), F\$(NF)

15:PZ = 6:FM = 10

- 5 FOR I = 1 TO NF: READ F\$(I): NEXT I: FOR I = 1 79 RETURNTO 11: READ D\$(I): NEXT
- 6 FOR I = 0 TO TZ: READTY\$(I),TF(I): NEXT I: FOR I = 0 TO 6: READ LO\$ (I): NEXT I: FOR I = 0TO FM: FOR J = 0 TO 3: READ AF\$(I, J): NEXT J: NEXT I: FOR I = 0 TO 1: FOR J = 0 TO PZ: READ WT\$(I,J): NEXT J: NEXT I: FOR I = 0 TO 10: READ M\$(I): NEXT I
- 7 GOTO 700
- 9 V = 1: PRINT "# \Diamond " ;: IF QC<= MF THEN PRINT "CO"; 12 PRINT " $<-\lozenge->\lozenge$ Z=ED \lozenge SPC =EXIT: ◊" ;: GET Q\$:I =

ASC (Q\$): IF I = 13 OR

- Q = "\lozenge"$ THEN PRINT : POP : GOTO 770 15 IF Q\$ < > "#" AND Q\$ < > "C" THEN 33
- 18 Z\$ = "" : IF Q\$ = "C"AND QC < = MF THEN Z\$ = "COPYOTOO"
- 21 PRINT Q\$: VTAB 23: CALL - 958: PRINT Z\$F\$(QC) "#◊(1-";NT;: INPUT "): \(\)" ; \(\)\$: IF \(\)\$ = ""
- THEN POP : GOTO 770 24 I = 1:Q = VAL (Q\$): IFQ > 0 AND Q < = NT THEN N2 = Q:I = 2
- 27 IF Z\$ = "" OR I = 1 ORQC > MF THEN RETURN 30 GOSUB 61: RETURN
- 33 N2 = N2 (N2 > 1) * (I= 8) + (N2 < NT) * (I =21):I = (I = 8) + (I =21)
- 36 IF Q\$ = "Z" THEN V = 037 IF ASC (Q\$) < 32 THEN Q\$ = "-"
- 39 PRINT Q\$: RETURN
- 49 REM **READ ARTIF INFO** 50 PRINT RE\$; N2 + NX: INPUT AD\$
- 51 PRINT D\$ "READ ♦ EAMON .ARTIFACTS, R" ; N2: INPUT 120 REM MK.ARTIFACT AN\$, VL, TY, WT, RO: FOR I =0 TO 3: INPUT PA(I):
- 57 REM WR.CHANGE 58 GOSUB 64: IF Q\$ = "Y"
- THEN 61 59 VTAB 23: PRINT "REDO?◊ (Y/N) 0"; GET Q\$: PRINT 135 PRINT WE\$; N2 + NX: Q\$: IF Q\$ = "Y" THEN Q\$= "R" : RETURN
- 60 Q\$ = "X" :V = 1: RETURN 61 ON QC GOSUB 110,135,
- 160,175: PRINT D\$ 62 V = 1:Q\$ = "S" : RETURN
- 63 PRINT "RMS=" ; N% (1); " \Diamond ART="; N%(2); " \Diamond EFF=" ; N%(3); " $^{\circ}MONS=$ "; N%(4): RETURN
- 64 VTAB 23: PRINT "♦SAVE (Y/N) \Diamond " ;: GET Q\$: IF Q\$ < > "Y" THEN Q\$ = "N"
- 65 PRINT Q\$: RETURN + I * 5 - (DR%(I) < 0)):
- PRINT DR%(I);: NEXT I: PRINT : RETURN 70 REM **OPENS**
- 71 PRINT OE\$ "ARTIFACTS, L" ; LA: RETURN
- 72 PRINT OE\$ "DESC, L242" : RETURN
- 73 PRINT OE\$ "MONSTERS, L" ; LM: RETURN 74 PRINT OE\$ "ROOMS, L"
- ; LR: RETURN 75 PRINT OE\$ "NAME" :
- RETURN
- 76 REM **READ ROOM INFO** 77 PRINT RE\$; N2: INPUT R2\$
- 78 PRINT D\$ "READ EAMON .ROOMS, R" ; N2: INPUT R1\$: FOR I = 1 TO ND: INPUT DR%(I): NEXT I: INPUT LT: PRINT D\$
- 80 REM **READ DESC PARMS** 81 GOSUB 72: PRINT RE\$;0: FOR I = 1 TO 4: INPUT
- N%(I): NEXT I: INPUT LR, LM, LA: PRINT DS: RETURN
- 87 REM **WRITE DESC PARMS**
- 88 GOSUB 72: PRINT WE\$;0: FOR I = 1 TO 4: PRINT N%(I): NEXT I: PRINT LR: PRINT LM: PRINT LA: PRINT D\$: RETURN
- 89 REM **WR.NAME** 90 GOSUB 75: PRINT D\$ "WRITE EAMON . NAME" :
- PRINT DU\$: PRINT ND\$: PRINT DV\$: PRINT CC\$: RETURN
- 91 REM MAKE . NEW

- 92 ON QC GOSUB 105,125, 155,170
- 93 FOR K = 1 TO PX: IF N% (QC) > = NX THEN 9794 N%(QC) = N%(QC) + 1:N2= N%(QC): VTAB 23: PRINT "CREATINGO" F\$(QC) "O#" ;N2; ".◊◊"
- 95 Q\$ = STR\$ (N2): ON QC GOSUB 107,127,157,173: PRINT D\$
- 96 NEXT K
- 97 PRINT D\$: GOSUB 88:V = 1: RETURN
- 98 REM OPEN ARTIF & RM 99 GOSUB 71
- 100 REM MK.ROOM
- 105 GOSUB 74: GOSUB 72: RETURN
- 107 R1\$ = "ZILCHOROOM" + Q\$:R2\$ = "YOU\$ ARE\$ IN**♦ THE • + R1 • + "."**
- 110 PRINT WE\$; N2: PRINT CHR\$(34);R2\$; CHR\$(34): PRINT D\$ "WRITE EAMON. ROOMS, R"; N2: PRINT CHR\$ (34); R1\$; CHR\$ (34): FOR 240 DU\$ = Q\$: GOSUB 90 I = 1 TO ND: PRINT
- 115 RETURN
- 125 GOSUB 72: GOSUB 71: RETURN
 - = "YOU\SEE\AN\UGLY\" + AN\$ + "." : VL = 5:TY =2:WT = 3: FOR I = 0 TO3:PA(I) = 3:NEXTI
 - PRINT CHR\$ (34); AD\$; CHR\$ (34): PRINT D\$ "WRITE EAMON . ARTIFACTS ,R"; N2: PRINT CHR\$ (34) ;AN\$; CHR\$ (34): PRINT VL: PRINT TY: PRINT WT:
 - PRINT RO 140 FOR I = 0 TO 3: PRINT PA(I): NEXT I
 - 145 RETURN
 - 150 REM MK.EFFECT
- 155 GOSUB 72: RETURN 157 EF\$ = "EFFECT\\" + Q\$
- + "OTEXTOGOESOHERE." 66 FOR I = 1 TO 6: HTAB (6 160 PRINT WE\$; N2 + 2 * NX: PRINT CHR\$ (34); EF\$;
 - CHR\$ (34): RETURN 165 REM MK.MONST
 - 170 GOSUB 72: GOSUB 73: RETURN
 - 173 MN\$ = "BUG" + Q\$:MD\$ = "YOU SEE A GROADY " + MN\$ + "!" : FOR I = 0 TO10:M%(I) = 1: NEXT I
 - 175 PRINT WE\$; N2 + 3 * NX: PRINT CHR\$ (34); MD\$; CHR\$ (34): PRINT D\$ "WRITE EAMON . MONSTERS , R" ;N2: PRINT CHR\$
 - (34); MN\$; CHR\$ (34): FOR I = 0 TO 10: PRINT M%(I): NEXT I: RETURN
 - 180 REM ** INIT.FILES 185 PRINT CCS: POKE 216,0:
 - HOME : IF DU\$ = "" OR DU\$ = "X" THEN 190
 - 186 PRINT "MISSING EAMON 187 PRINT : PRINT DUS
 - 189 PRINT "USE ◊ 6.X ◊ EDITOR ◊ FOROTHISOADV.O";: GET Q\$: PRINT : GOTO 980
 - 190 VTAB 23: PRINT "MAKE ◊NEW◊EAMON◊7.X◊FILES◊&" ;: GOSUB 64: IF Q\$ < > "Y" THEN 980
 - 195 HOME : INPUT "ADV.NAME :◊" ;Q\$: IF Q\$ = "" OR ASC (Q\$) = 27 THEN 980
 - 200 IF LEN (Q\$) > 30 OR LEN (Q\$) < 3 THEN PRINT : PRINT "LENGTH ERROR **◊>>◊"** ;: **GET Q\$**: **PRINT** : GOTO 195 202 DU\$ = Q\$: INPUT "MOVE
 - MENTÔDIRECTIONSÔ (6ÔORÔ 10):0"; ND\$: IF ND\$ = ""

- OR ASC (ND\$) = 27 THEN 980 203 ND = VAL (ND\$): IF ND < > 6 AND ND < > 10 THEN
- 980 204 ND = STR\$ (ND):DV\$ =
- "7.0" 205 GOSUB 90
- 208 LR = 72:LM = 92:LA =72: FOR I = 1 TO MF: N% (I) = 0: NEXT I: GOSUB71: GOSUB 72: GOSUB 73:
 - GOSUB 74:PX = 1: FOR QC = 1 TO MF: GOSUB 93: NEXT QC
- 210 GOTO 747
- 219 REM **NAME CHANGE**
- 220 HOME : PRINT DU\$ "/◊" ND\$ "/◊" DV\$: VTAB 2:I\$ = DU\$: PRINT : INPUT
- "NEWONAME: O" ; Q\$: IF Q\$ = "" THEN 770
- 225 I = LEN (Q\$): IF I > 30 OR I < 3 THEN PRINT "LENOERROROSO" ;: GET
- Q\$: PRINT : GOTO 220 242 ONERR GOTO 255
- DR%(I): NEXT I: PRINT LT 244 PRINT D\$ "UNLOCK" I\$: PRINT D\$ "RENAME" I\$ "," DU\$
 - 255 POKE 216,0: GOTO 770 259 REM *LOC LABEL*
- NEXT I: PRINT D\$: RETURN 127 AN\$ = "STICK" + Q\$:AD\$ 260 LK = (RO > 500) + 2 * (RO > 200 AND RO < 500)
 - + 3 * (RO > 999 AND RO< -1) + 4 * (RO = -1)
 - + 5 * (RO = 999) + 6 *(RO = 0): HTAB 1: CALL -
 - 958: PRINT "LOCATION ◊(" LO\$(LK) "):" ;: HTAB 30: PRINT RO;: RETURN
 - 278 REM ** ROUTINE TO INPUT I\$, HAVING BEEN PASSED I2\$ **
 - 280 I\$ = "" : IF I2\$ = "" THEN 12 = "MSG \lozenge GOES \lozenge$ HERE"
 - 282 PRINT 12\$;: CALL -958: FOR A = 1 TO LEN (12\$):
 - PRINT CHR\$(8); : NEXT 283 GET A\$:J = ASC (A\$):IF J = 13 THEN CALL -958: IF I\$ = "" THEN I\$
 - = 12\$: PRINT 12\$: RETURN 284 IF J = 13 THEN PRINT : RETURN
 - 285 IF J > 31 AND LEN (I\$) > = TL THEN PRINT CHR\$ (7);: GOTO 283
 - 286 IF J = 9 AND LEN (I\$) > = TL THEN PRINT CHR\$ (7);: GOTO 283
 - 288 IF J > 31 THEN PRINT A\$;:I\$ = I\$ + A\$:I2\$ =MID\$ (12\$,2): GOTO 283 290 IF J = 5 THEN PRINT
 - 12\$;:1\$ = 1\$ + 12\$:12\$ ="" : GOTO 283
 - 292 IF J = 2 AND LEN (I\$) THEN FOR A = 1 TO LEN (I\$): PRINT CHR\$ (8);: NEXT A: 12\$ = 1\$ + 12\$: 1\$
 - = "" : GOTO 283 294 IF J = 4 THEN I2\$ = MID\$ (12\$,2): GOTO 282
 - 296 IF J = 9 THEN I2\$ = " \diamond " + 12\$: IF LEN (I\$) + LEN (12\$) > = TL THEN12\$ = LEFT\$ (12\$, LEN
 - (I2\$) 1)297 IF J = 9 THEN 282298 IF J = 21 AND LEN
 - (12\$) THEN A\$ = LEFT\$(12\$,1):J = ASC (A\$):GOTO 285
 - 300 IF J = 21 THEN A\$ = " \Diamond " :J = ASC (A\$): GOTO 285
 - 302 IF J = 8 AND LEN (I\$) > 1 THEN I2\$ = RIGHT\$ (1\$,1) + 12\$:1\$ = LEFT\$(I\$, LEN (I\$) - 1): PRINT A\$;: GOTO 283
 - 304 IF J = 8 AND LEN (I\$)> 0 THEN 12\$ = 1\$ +

12\$:1\$ = "" : PRINT A\$;GOTO 283 308 IF J = 27 THEN PRINT 12\$:1\$ = 1\$ + 12\$:RETURN 310 GOTO 283 330 VTAB VV: HTAB HH: GOSUB 280: IF I\$ = "/" THEN POP : GOTO 770 350 RETURN 699 REM *** M A I N L I N E *** 700 DU\$ = "X" : TEXT :HOME : PRINT "NUEDIT" : PRINT : PRINT "INSERTO DISKETTE ◊TO ◊BE ◊EDITED. ◊ <KEY>◊" ;: GET Q\$: PRINT : IF ASC (Q\$) = 27 THEN HOME: GOTO 980 710 ONERR GOTO 185 720 Q\$ = "6" : GOSUB 75: PRINT D\$ "READ EAMON .NAME" : INPUT DUS: INPUT ND\$: INPUT DV\$: PRINT CC\$: POKE 216,0:ND 1110 VV = 14: VTAB VV - 2: = VAL (ND\$):I = VAL (LEFT\$ (DV\$,1): IF I < 7 THEN HOME: GOTO 187 730 GOSUB 81 747 ZL = 238:ML = LM -62:AL = LA - 42:RL = LR- 34 . 748 M\$ = "N\$S\$E\$W\$U\$D\$\$" : IF ND = 6 THEN 770749 M = "NSEWUD \lozenge TVXY \lozenge "$:F\$(NF - 1) = F\$(NF):NF= NF - 1750 GOTO 770 760 PRINT : PRINT "MAX◊ NUMBERÔOFÔ" F\$(QC) "SÔIS **◊"** ;NX; ".**◊"** ;: GET Q\$: PRINT 770 PRINT CC\$:X = FRE(0): 1150 NEXT IHOME : GOSUB 8000: PRINT 1160 Q\$ = "" : IF NOT V Q\$ "ÔÔVREF:Ô" ; PEEK (175) + 256 * PEEK (176)780 PRINT : PRINT DU\$: PRINT : PRINT "DIRECT IONS: ♦ ND\$: PRINT "VERS ION♦IS♦♦" DV\$: PRINT 790 V = 1:N2 = 1:PX = 0:GOSUB 63: PRINT 800 FOR I = 1 TO NF: PRINT 1220 IF NOT V THEN ON Q "[" LEFT\$ (F\$(I),1) "]◊◊" F\$(I): NEXT I 810 PRINT : PRINT " $[\lozenge]$ \lozenge \lozenge SELECT" ;: HTAB 2: GET Q\$: PRINT Q\$ 820 FOR I = 1 TO NF: IF Q\$ < > LEFT\$ (F\$(I),1) THEN NEXT I: GOTO 770 830 QC = I840 HOME : GOSUB 63: VTAB 7: PRINT F\$(QC): IF QC = 1243 GOSUB 51: IF PA(0) <NF THEN 980 845 IF Q\$ = "N" THEN 965850 Q\$ = "ROOM" : IF QC < = MF THEN Q\$ = F\$(QC): PRINT : PRINT "ENTERO+ **♦ TO ♦ ADD ♦ NEW • Q\$** "(S) • OR" 860 PRINT : PRINT "♦ENTER ◊" Q\$;: INPUT "◊NUMBER◊ **◊>>◊"** ;Q\$: IF Q\$ = "" THEN 770 870 IF QC > MF THEN N% (QC) 1250 GOTO 1200 = N%(1): GOTO 960875 IF Q\$ < > "+" THEN 960 880 IF (N%(QC) > = NX)THEN 760 890 PRINT : PRINT "CREATE \emptyset HOW \emptyset MANY \emptyset " F\$(QC);: INPUT "S? $\Diamond \Diamond >> \Diamond$ " ;Q\$: IF Q\$ = "" THEN 770900 PX = VAL (Q\$): IF PX < (D\$(I),1); SPC(4);: 2 THEN PX = 1910 GOSUB 92: GOTO 770 960 Q = INT (ABS (VAL)(Q\$))): IF Q < 1 OR Q > N% (QC) THEN 770 965 ON QC GOSUB 99,125, 155,170,115,99 970 N2 = Q: ON QC GOTO1010, 2010, 3010, 4010, < 0));N2; 220,1510 980 PRINT CC\$: PRINT CHR\$ 1550 IF N2 = 0 THEN HTAB 11: PRINT "...♦NONE♦..." (4) "MAXFILES♦3" : PRINT

: END 1000 REM *** ROOMS *** 1010 GOSUB 77 1020 HOME : PRINT "ROOM◊" ;N2;: HTAB 15: PRINT "LIGHTING: \(\rangle \) ; LT; : IF V THEN PRINT : GOTO 1025 1022 HTAB 25: INPUT "" ;Q\$: IF Q\$ = "" THENVTAB 1: HTAB 25: PRINT LT: GOTO 1025 1023 LT = VAL (Q\$)1025 VTAB 3: IF V THEN PRINT "0" R1\$: GOTO 1070 1030 VV = 3:HH = 2:TL =RL:12\$ = R1\$: GOSUB 3301040 IF I\$ = "" THEN 1070 1060 R1\$ = I\$1070 VTAB 5: IF V THEN PRINT R2\$: GOTO 1110 1080 VV = 5:HH = 1:TL =ZL:I2\$ = R2\$: GOSUB 3301090 If 1\$ = "" THEN 11101100 R2\$ = I\$PRINT "EXITS (0=NONE) NEG=STRANGE♦+500=DOOR) --": FOR I = 1 TO ND 1120 VTAB VV + INT ((I -1) / 2): HTAB (1 + 19 * (I / 2 = INT (I / 2))): PRINT D\$(I); " \Diamond ---> \Diamond RM \Diamond " ;DR%(I);: IF V THEN PRINT : GOTO 1150 6 8 1130 HTAB (15 + 19 * (I / 2 = INT (I / 2)): INPUT 2130 AD\$ = I\$ "" ; Q\$: IF Q\$ = "" THEN VTAB VV + INT ((I - 1) /2): HTAB (15 + 19 * (I /2 = INT (I / 2)): PRINT DR%(I): GOTO 1150 1140 DR%(I) = VAL (Q\$)THEN QC = 1: GOSUB 58: IF Q\$ = "R" THEN 1020 1170 IF Q\$ = "X" THEN 1010 2170 VTAB VV + 4: HTAB 1: 1200 VTAB 23: PRINT M\$;:NT = N% (1) : GOSUB 91210 Q = (QC = 1) + 2 *(QC < > 1): IF I THEN ON Q GOTO 1010,1510 GOTO 1020,1010 1230 FOR I = 1 TO ND: IF Q\$ < > LEFT\$ (D\$(I),1)THEN NEXT I: GOTO 1200 1240 IF ABS (DR\$(I)) < 501OR ABS (DR%(I)) > 700**THEN 1245** 1242 ZZ = N2:N2 = ABS(DR%(I)) - 500: IF N2 >N% (2) THEN 1244 > 0 AND ABS (PA(0)) < =N%(1) THEN N2 = ABS(PA(0)): GOTO 1247 1244 N2 = ZZ: GOTO 1200 1245 IF DR%(I) < > 0 AND ABS (DR%(I)) < = N%(1)THEN N2 = ABS (DR%(I)): GOTO 1247 1246 GOTO 1200 1247 ON Q GOTO 1010,1510 1500 REM *** DISP RM CONNECTS *** 1510 ZZ = N2: GOSUB 78: FOR I = 1 TO 6:R%(I) =DR%(I): NEXT I 1520 HOME : PRINT "ROOM◊" ; N2; : HTAB 11: FOR I = 1TO 6: PRINT LEFT\$ NEXT I: PRINT 1530 FOR I = 1 TO 39: PRINT "_" ;: NEXT I: PRINT 1540 FOR J = 1 TO 6:N2 = R%(J):K = J * 2 + 3:VTAB K: PRINT LEFT\$ (D\$(J),1) "0#" ; SPC(2)- (ABS (N2) > 9) - (N2)

: GOTO 1590 1555 IF N2 > 500 AND N2 <600 THEN HTAB 11: PRINT "...◊**A**◊**DOOR**◊..." : **GOTO** 1590 1560 IF N2 > N% (1) THEN HTAB 11: PRINT "...♦UND **EFINED**◊..." : **GOTO** 1590 1570 IF N2 < 0 THEN HTAB 11: PRINT "...♦SPECIAL **♦..."** : GOTO 1590 1580 PRINT : GOSUB 74: GOSUB 78: VTAB K: GOSUB 66: GOTO 1590 1590 NEXT J 1600 N2 = ZZ: FOR I = 1 TO 6:DR%(I) = R%(I): NEXTI: GOTO 1200 2000 REM *** ARTIFACTS *** 2305 PRINT : GOTO 2292 (RD & WR 8 PARMS FOR ALL 2308 HTAB 30: INPUT "" FMTS) 2010 GOSUB 50 2040 HOME : PRINT "ARTO#" ;N2; "◊◊◊◊" ;: HTAB 9: IF V THEN PRINT ANS: GOTO 2090 2050 VV = 1:HH = 9:TL =AL:12\$ = AN\$: GOSUB 3302060 if i = "" THEN 20902080 AN\$ = 1\$2090 VTAB 3: IF V THEN PRINT AD\$: GOTO 2140 2100 VV = 3:HH = 1:TL =ZL:I2\$ = AD\$: GOSUB 3302120 IF I\$ = "" THEN 2140 2140 VV = 7: VTAB VV + 3:PRINT "VALUE ◊ IN ◊ GOLD ◊ PIECES: O" ;: HTAB 30: PRINT VL; : IF V THEN PRINT: GOTO 2170 2150 HTAB 30: INPUT "" ;Q\$: IF Q\$ = "" THENVTAB VV + 3: HTAB 30: PRINT VL: GOTO 2170 2160 VL = VAL (Q\$)PRINT "TYPE:◊" TY\$(TY) "◊◊◊◊" ;: HTAB 30: PRINT TY;: IF V THEN PRINT : GOTO 2220 2180 PRINT "◊<-◊->◊" ;: GET Q\$:I = ASC (Q\$): IFI = 13 THEN PRINT : GOTO 3120 GOTO 3090 2220 2190 IF I = 8 THEN TY = TY 4010 PRINT RE\$; N2 + 3 \star - (TY > 0) + TZ * (TY =0) 2200 IF I = 21 THEN TY =TY + (TY < TZ) - TZ *(TY = TZ)2210 PRINT : GOTO 2170 2220 VTAB VV + 5: PRINT "WEIGHT◊IN◊GRONDS:◊" ;: HTAB 30: PRINT WT;: IF V THEN PRINT: GOTO 2250 2230 HTAB 30: INPUT "" ;Q\$: IF Q\$ = "" THEN **VTAB VV + 5: HTAB 30:** PRINT WT: GOTO 2250 2240 WT = VAL (Q\$)2250 IF V THEN 2255 2253 VTAB VV + 7: PRINT "INOROOMOX: OXOOOOEMBED ◊INORMOX: OX+200" : PRINT "CARRIED: ◊◊-1◊◊◊◊◊οN◊MON $STER \Diamond X : \Diamond -X -1$ " : PRINT "WORN: ◊◊◊◊◊-999◊◊◊IN◊ARTI 4150 PRINT M\$(I) ":◊" ;: **FACT**◊X: ◊X+500" 2255 VTAB VV + 12 - V * 6: GOSUB 260: IF V THEN PRINT : GOTO 2290 2260 HTAB 30: INPUT "" ;Q\$: IF Q\$ = "" THEN 2275 2270 RO = VAL (Q\$)2275 VTAB VV + 6: GOSUB 260: PRINT 2290 ZZ = TF(TY) : FOR I =0 TO 3 1: PRINT AF\$(ZZ,I) ":◊" ;: IF (I < > 1) OR (ZZ <> 1 AND ZZ < > 9) THEN 2298

2294 PRINT WT\$((ZZ =1),PA(I)); 2298 HTAB 30: PRINT PA(I);: IF V THEN PRINT : GOTO 2320 2300 IF (I < > 1) OR (ZZ <> 1 AND ZZ < > 9) THEN 2308 2301 PRINT " $\Diamond < - \Diamond - > \Diamond$ " ;: GET Q\$:J = ASC (Q\$): IFJ = 13 THEN PRINT : GOTO 2302 IF J = 8 THEN PA(I) = PA(I) - (PA(I) > 0) + PZ $\star (PA(I) = 0)$ 2303 IF J = 21 THEN PA(I) = PA(I) + (PA(I) < PZ) -PZ * (PA(I) = PZ);Q\$: IF Q\$ = "" THENVTAB VV + 7 + I: HTAB 30: PRINT PA(I): GOTO 2320 2310 PA(I) = VAL (Q\$)2320 NEXT I 2430 Q\$ = "" : IF NOT V THEN GOSUB 58: IF Q\$ = "R" THEN 2040 2440 IF Q\$ = "X" THEN 2010 2470 VTAB 23:NT = N%(2):GOSUB 9 2480 IF I THEN 2010 2490 IF NOT V THEN 2040 2500 GOTO 2470 3000 REM *** EFFECTS *** 3010 PRINT RE\$; N2 + 2 * NX: INPUT EF\$: PRINT D\$ 3020 HOME : PRINT "EFFECT **♦#";N2:VTAB 3: IF V THEN** PRINT EF\$: GOTO 3090 3030 VTAB 3: HTAB 1:VV = 3:HH = 1:TL = ZL:I2\$ =EF\$: GOSUB 330 3040 IF I\$ = "" THEN 30603050 EF\$ = I\$3060 GOSUB 58: IF Q\$ = "R" THEN 3020 3070 IF Q\$ = "X" THEN 3010 $3090 \text{ VTAB } 23:\text{NT} = \text{N}^{2}(3):$ GOSUB 9 3100 IF NOT V THEN 3020 3110 IF I THEN 3010 4000 REM *** MONSTERS *** NX: INPUT MD\$: PRINT D\$ "READ EAMON . MONSTERS , R" ; N2: INPUT MN\$: FOR I =0 TO 10: INPUT M% (I): NEXT I: PRINT D\$ 4040 HOME : PRINT "MON♦#" ;N2; "◊◊◊◊" ;: HTAB 9: IF V THEN PRINT MN\$: GOTO 4090 4050 VV = 1:HH = 9:TL =ML:12\$ = MN\$: GOSUB 3304060 IF I\$ = "" THEN 4090 4080 MN = 1\$ 4090 VTAB 3: IF V THEN PRINT MD\$: GOTO 4140 4100 VV = 3:HH = 1:TL =ZL:12\$ = MD\$: GOSUB 3304120 IF I\$ = "" THEN 4140 4130 MD\$ = I\$ 4140 VTAB 10: FOR I = 0 TO 10 HTAB 20: PRINT M%(I);: IF V THEN PRINT : GOTO 4180 4160 HTAB 20: INPUT "" ;Q\$: IF Q\$ = "" THENVTAB 10 + I: HTAB 20: PRINT M% (I): GOTO 4180 4170 M%(I) = VAL (Q\$)4180 NEXT I 4190 Q\$ = "" : IF NOT VTHEN GOSUB 58: IF Q\$ = "R" THEN 4040 2292 VTAB VV + 7 + I: HTAB 4200 IF Q\$ = "X" THEN 4010 4230 VTAB 23:NT = N 4 (4): GOSUB 9 4240 IF I THEN 4010 4250 IF NOT V THEN 4040 4260 GOTO 4230

8000 Q\$ = "" :J = PEEK
(103) + 256 * PEEK (104)
+ 4: FOR I = 1 TO 11:Q\$
= Q\$ + CHR\$ (128 + PEEK
(J + I)): NEXT I: RETURN
8999 REM *F\$(I)
9000 DATA ROOM, ARTIFACT,
EFFECT, MONSTER, NAMEO
CHANGE, CONNECTIONS, X-IT
9010 REM *D\$(I)
9020 DATA NORTH, SOUTH, EAST
O, WESTO, UPOOO, DOWNO, TNEO, V-NWO, X-SEO, YSWO, NONE

SWO, NONE

9030 REM *TY\$(TZ) TF(TZ)

<TYPE NAMES & FMT #'S>

9040 DATA GOLD/MONEY, 0, STD

.OTREASURE, 0, STD.OWEAPON
,1,ODDOWEAPON, 1, CONTAIN
ER, 2, LIGHTABLE, 3, DRINK
ABLE, 4, READABLE, 5, DOOR/
GATE, 6, KEY/OPENER, 7, BOUN
DOMNST, 8, WEARABLE, 9, DOOR
-12,10, CUSTOM-13, 0, CUST
OM-14,0, CUSTOM-15, 0

9043 REM *LO\$(I)*

9045 DATA INOROOM, INSIDEO

CONTAINER, EMBEDDED () IN ()
ROOM, ON () MONSTER, CARRIED
, WORN, ???
9050 REM *AFS (FM.J) < ARTI

9050 REM *AF\$(FM,J) <ARTIF PARMS #5-#8>

9060 DATA #5,#6,#7,#8,WEA PONOCOMPLEXITY,WEAPON OTYPE,HITODICE,HITOSIDES

9070 DATA KEYO#, STRENGTH, OPEN?, #8, DURATION, #6, #7, #8

9080 DATA HEAL AMT, DOSES, OPEN?, #8, 1ST EFFECT, NUM. OOF EFFECTS, OPEN?, #8

9090 DATA ROOM BEYOND, KEY \$\dagger\$, STRENGTH, HIDDEN?, #5 , #6, #7, #8

9100 DATA MONSTER #, KEY #, GUARD #, #8, ARMOR CLASS, TYPE, #7, #8, ROOM BEYOND, KEY #, OPEN?, HIDDEN?

9110 REM *WT\$(PZ) <ARTIF. PARM #6 WEAP/ARMOR TYPES>

9120 DATA ARMORÔ, CAPEÔÔ,
BOOTSÔ, GLOVES, HELMÔÔ,
CTYP#5, CTYP#6, NONEÔÔ, AXE
ÔÔÔ, BOWÔÔÔ, CLUBÔÔ, SPEARÔ
, SWORDÔ, CUSTOM

9130 REM *M\$(I) <MONSTER PARMS>

9140 DATA HD, AG, GROUP SIZE, COURAGE, ROOM, WEIGHT/PRM5, ARMOUR, WEAPON#, HIT ODICE, HIT SIDES, FRIEND LINESS

Checksums

	0-\$92CC	24-\$CC06	60-\$5BCC
	1-\$DB99	27-\$0652	61-\$BC83
	2-\$EB48	30-\$1845	62-\$25B9
	3-\$7A80	33-\$C60A	63-\$2B49
	4-\$C71B	36-\$5C8A	64 - \$B145
	5-\$BE89	37-\$38E7	65-\$D6CD
	6-\$0217	39-\$D453	66-\$4DC7
	7-\$71FC	49-\$C881	70-\$1981
	9-\$6DEC	50-\$8682	71-\$2CB6
	12 - \$726A	51-\$8941	72-\$D75A
	15 - \$D129	57 - \$5A98	73 - \$FA8B
	18-\$CE28	58-\$D3D1	74-\$BBB4
2	21-\$DE1A	59-\$1DC0	75 - \$340D

Vendors

Eamon Adventurer's Guild 7625 Hawkhaven Drive Clemmons, NC 27012

atten: Tom Zuchowski (910-766-7490)

Product Monitor

7814 Santa Elena Houston TX 77061

atten: Jeff Hurlburt (713-645- A sector editor 8680) (This last title

Jack R. Nissel

Softkey for...

U.S. Atlas Action Boppie's Great Word Chase Verb Viper Word Man

PA

Softkey for...

Space Math
Learning Well .

Softkey for...

Reading for Meaning with Mother Goose

Metric Skills I Metric Skills II Compound Words and

Contractions

Nouns/Pronouns 1
Antonyms/Synonyms
Patterns and Sequence
Size and Logic

Observation and Classification Conservation and Counting Parquerty and Pictures Roots/Affixes Verbs

Chariots, Cougars, & Kings
Money! Money!

Hartley Courseware

Softkey for...

Peanut's Maze Marathon Fixit Galaxy Math Basic Facts Random House

Softkey for...

Dragon's Keep Sierra On-Line

Softkey for...

Piece of Cake Math Fraction Factory Springboard Software

Softkey for...

Sweet Shoppe Grabit Factory Eric Software

Softkey for...

Rhymes & Riddles Spinnaker Software

Softkey for...

Learn About Sounds

American Educational Computer

Softkey for...

Computer Literacy Adventures of the Lollipop Dragon

Cursor Control Adventures
Plotting and Programming Adventures
Letter and Key Number Adventures
Function Key Adventures

The Society for Visual Education

Requirements:

The original disk(s)

Blank disk(s) for each title

COPYA from your DOS 3.3 system master

A sector editor

(This last title was on the most wanted list, as of issue #62, as

separate titles. They are Lollipop Dragon: Cursor Control Adventures, Lollipop Dragon: Plotting and Programming Adventures, Lollipop Dragon: Letter and Key Number Adventures, and Lollipop Dragon: Function Key Adventures.)

Notes: On Peanuts Maze Marathon make the sector edit to both sides. On Rhymes & Riddles you do not need to do any sector edits. I found that when you write to the Hartley Courseware and American Educational titles it locks up certain sectors on your unprotected copy. To avoid this I put Diversi-DOS on my copies.

Step-by-step

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

POKE 47426,24 ignore checksum & epilogu errors

RUN COPYA

- 2. Copy your original disk to your blank disk.
- 3. Make the following sector edit to your copy.

<u>Trk Sct Byte</u> <u>From</u> <u>To</u> \$00 \$03 \$42 38 18

4. Write the sector back to the disk.

Softkey for...

States and Traits Crypto Cube

DesignWare

Requirements:

The original disk(s)
A blank disk for each title
Any fast copy program
A sector editor

Jim S. Hart's Softkey, in issue #52, for European Nations and Locations works for these titles as well.

- 1. Fast copy your original disk.
- 2. Search for the byte string A9 38 8D 9E B9 and change to EA EA EA EA EA.
- 3. Write the sector back to the disk.

Softkey for...

Maps & Globes: Understanding
Maps & Globes

Troll Associates

Requirements:

The original Maps & Globes: Understanding Maps & Globes disks 2 blank disks DOS 3.3 system master

Paul D. Dillion's softkey, in issue 60, for Maps & Globes Latitude & Longitude works for this title.

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

CALL-151 gets you into the monitor B954:29 00 ignore first byte of address header

B988:18 60 ignore both bytes of address epilogue

3D0G gets you back to Applesoft BASIC prompt

RUN COPYA

2. Copy both disks to your blanks

That's it.

Softkey for...

Math Tutor Fractions Part I
Math Tutor Multiplication
Math Tutor Division

Scholastic

Requirements:

The original disks 3 blank disks for each title COPYA from your DOS 3.3 system master Copy II Plus

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

POKE 47426,24 ignore checksum and epilogues

RUN COPYA

- 2. Copy your original program disks to your blank disks. You can use any fast copy program to copy the management disk.
- 3. Boot Copy II Plus and use the CHANGE BOOT PROGRAM function to change the boot program to HELLO on your copy of the program disks.

Softkey for...

Math Tutor Fractions Part II

Scholastic

Requirements:

tem master

The original disks 3 blank disks COPYA from your DOS 3.3 sys-

This title was slightly different then Math Tutor Fractions Part I. On even tracks the address prologues were D4 AA 96 and the address epilogues were AB AF. On odd tracks everything was normal. To deprotect this disk we will patch COPYA to allow both D4 and D5 in the address prologues and to ignore the address epilogues.

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

CALL-151 gets you into the monitor
B954:4A C9 6A D0 EF allows D4 and
D5 in address prologues

B988:18 60 ignores address epilogues
3D0G gets you back to the Applesoft
prompt

RUN COPYA

2. Copy your original program disks to your blank disks. You can use any fast copy program to copy your management disk.

That's it.

Softkey for...

Microzine Jr.

Scholastic^{*}

Requirements:
The original disks
4 blank disks

COPYA from your DOS 3.3 system master

Copy II Plus

Disk 1 was like Math Tutor Fractions Part II. On even tracks the address prologues were D4 AA 96 and the address epilogues were AB AF. On odd tracks everything was normal. We will make the same patches

to COPYA to allow both D4 and D5 in the address prologues and to ignore the address epilogues.

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

CALL-151 gets you into the monitor **B954:4A C9 6A D0 EF** allows D4 and D5 in address prologues

B988:18 60 ignores address epilogues 3D0G gets you back to the Applesoft prompt

RUN COPYA

- 2. Copy both sides of your original disk 1 to your blank disks.
- 3. Disk 2 is not protected so use Copy II Plus DISK COPY to copy both sides of disk 2 to your remaining blank disks.

Softkey for...

Freddy's Puzzling Adventures **DLM Software**

Requirements:

The original disk A blank disk COPYA from your DOS 3.3 system master

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

CALL-151 gets you into the monitor **B954:4A C9 6A D0 EF** allows D4 and D5 in address prologues

B942:18 ignores checksum and epilogue errors

3D0G gets you back to the Applesoft prompt

RUN COPYA

2. Copy your original disks to your blank disks.

That's it.

Softkey for...

The Factory

Sunburst Communications

Requirements: The original disk

A blank initializied disk Demuffin Plus DOS 3.3 system master A way to reset into the monitor A blank initializied slave disk with no HELLO program

The softkey in COMPUTIST #57 would not work for me. The 1030 GOSUB 430: GOSUB controller would die at track \$11, sector \$08. It's possible that this sector was bad and since there was no information on it the program was not affected. In order to get a COPYA version I did the following.

1. Boot your DOS 3.3 system master and at the Applesoft prompt put in your blank disk and enter;

NEW INIT LOGO DELETE LOGO

2. Boot your original disk and at the Applesoft prompt get into the monitor and enter;

6800<B800.BFFFM

3. Boot your slave disk. C600G

4. At the Applesoft prompt put in your disk containing Demuffin Plus and enter;

CALL-151 BLOAD DEMUFFIN PLUS,A\$803 B800<6800.6FFM A851G

803G

5. Copy the files using the wildcard (=) option from your original to your blank disk.

Softkey for...

Max Dublin's Treasure

Grolier

Requirements:

The original disk A blank initialized disk A blank initialized slave disk with no HELLO program Super IOB v1.5

A way to reset into the monitor

This title can be deprotected by using Super IOB with the Swap Controller that uses the RWTS of the protected disk to read the original disk then uses a normal RWTS to write the information back to your blank disk.

1. INITialize your blank disk **INIT HELLO DELETE HELLO**

- 2. Boot your original disk and at the Applesoft prompt reset into the monitor.
- 3. Move the RWTS to a safe place by entering:

1900<B800.BFFFM

4. Put in your slave disk and boot it by entering:

C600G

5. After the disk boots and the Applesoft prompt appears insert your Super IOB disk and save the RWTS to it by entering:

BSAVE RWTS.MAX DUBLIN, A\$1900, L\$800

6. Install the controller into Super IOB, run it and copy your original disk to your blank disk. Answer NO when asked if you want to INITialize the blank disk.

CONTROLLER

1000 REM MAX DUBLIN.CON 1010 TK = 3:ST = 0:LT =35:CD = WR

1020 T1 = TK: GOSUB 490: GOSUB 360: ONERR GOTO

100:ST = ST + 1: IF ST <DOS THEN 1030

1040 IF BF THEN 1060 1050 ST = 0: TK = TK + 1:IF TK < LT THEN 1030

1060 GOSUB 490:TK = T1:ST = 0: GOSUB 360 1070 GOSUB 430: GOSUB 100:ST = ST + 1: IF ST <

DOS THEN 1070 1080 ST = 0: TK = TK + 1:IF BF = 0 AND TK < LT

THEN 1070 1090 IF TK < LT THEN 1020 1100 HOME : PRINT

"COMPLETED, ODONE, O THROUGH, OFINISHED" : END 10010 IF PEEK (6400) < >

162 THEN PRINT CHR\$ (4) "BLOAD ORWIS. MAX O DUBLIN, A\$1900"

Checksums

1000-\$356B	1040-\$6342	1080-\$6CA2
1010-\$3565	1050-\$ABA3	1090-\$9DCA
1020-\$6170	1060-\$20C0	1100-\$8BBF
1030-\$7771	1070-\$28C5	10010-\$4616

Softkey for...

Bike Hike

Learning Technologies

Requirements:

The original disk A blank disk

COPYA from your DOS 3.3 system master

A sector editor

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

POKE 47426,24

RUN COPYA

- 2. Copy your original to your blank disk
- 3. Make the following sector edits to your copy.

<u>Trk</u>	<u>Sct</u>	<u>Byte</u>	<u>From</u>	<u>To</u>
0E	03	76-77	D0 ED	60 EA
11	00	01	11	03 .

Softkey for...

Math in a Nutshell **Clowning Around**

Learning Technologies

Requirements:

The original disk(s) A blank disk for each title DOS 3.3 system master A sector editor

1. Boot your DOS 3.3 system master and at the] prompt enter:

POKE 47426,24 ignore checksums and epilogues

RUN COPYA

- 2. Copy your original to your blank disk.
- 3. Make the following sector edit to your copy.

<u>Trk</u>	Sct	<u>Byte</u>	From	<u>To</u>
00	03	42	38	18

4. Write the sector back to the disk.

Softkey for...

Let's Learn about the Library

Troll Courseware

Requirements:

The original program 3 blank sides COPYA from your DOS 3.3 sys-

tem master 1. Boot your DOS 3.3 system master and at the Applesoft

prompt enter: **CALL-151** B954:29 00 B942:18 3D0G

RUN COPYA

2. Copy all 3 disks to your blank

You now have a COPYA copy.

Softkey for...

Grade Manager v2.3 **MECC**

Requirements:

The original disk A blank disk Copy II Plus Advanced COPYA

1. Boot Advanced COPYA and use the following setup.

<u>Ouestion</u>	Response
Use foreign RWTS	NO
Start track	01
End track	34
Read as half tracks	NO

Disable DOS error checkingNO
Continue reading on errorNO
All of the above correctYES
Change address/data bytes YES
A1 (normal: 213/D5)170
A2 (normal: 170/AA)213
A3 (normal: 150/96)173
E1 (normal: 222/DE) Press return
E2 (normal: 170/AA)Press return
D1 (normal: 213/D5) Press return
D2 (normal: 170/AA)150
D3 (normal: 173/AD)170
E1 (normal: 222/DE) Press return
E2 (normal: 170/AA)Press return
All of the above correctYES
Format target diskYES
2. Use Copy II Plus SECTOR
COPY to copy sector \$00 from

your original disk to your copy. 3. Make the following sector edits to your copy.

<u>Trk</u>	<u>Sct</u>	<u>Byte</u>	<u>From</u>	<u>To</u>
\$00	\$02	\$F1	96	AA
\$00	\$02	\$FC	AA .	AD
\$00	\$03	\$55	AA	D5
\$00	\$03	\$5F	D5	AA
\$00	\$03	\$6A	AD	96
\$00	\$06	\$7A	AA	D5
\$00	\$06	\$7F	D5	AA
\$00	\$06	\$84	AD	96
\$0B	\$04	\$1A-3A	AA D5 96 AA	D5 AA 96 D5
			D5 96 AA D5	AA 96 D5 AA
			AD D5 AA 96	96 D5 AA 96
			D5 AA 96 D5	D5 AA 96 D5
			AA AD D5 AA	AA AD D5 AA
			AD D5 AD AA	AD D5 AA AD
			D5 96 AA D5	D5 AA AD D5
			AD AA DŚ AA	AA AD D5 AA
			96	AD

4. Write each sector back to the disk before going to the next sector.

Softkey for...

Algebra Shop

Scholastic

Requirements:

The original disk 2 blank disk sides

COPYA from your DOS 3.3 system master

Upon examining this disk I found that side two was unprotected and side one was protected by altered epilogues and by the first byte in the address header being changed to D4 on every other track, which made this program easy to softkey.

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

CALL-151 B942:18 B954:29 00 3D0G **RUN COPYA**

- 2. Copy side one of your original to one of your blank disks.
- 3. Use any fast copy program to copy side two.

Nothing else needs to be done.

Softkey for...

Spare Moments

MECC

Requirements:

The original disk 2 blank initialized disk sides A blank initialized slave disk Super IOB v1.5

A way to reset into the monitor

The controller listed below

To deprotect both sides of this MECC title we will use Super IOB with the Swap Controller and use the RWTS of the protected disk to read the original disk then use a normal RWTS to write the information back to your blank disk.

1. INITialize your blank disks INIT HELLO

DELETE HELLO

- 2. Boot side one of your original disk and at the Applesoft prompt reset into the monitor.
- 3. Move the RWTS to a safe place by entering: 1900<B800.BFFFM
- 4. Put in your slave disk and 1. Boot your DOS 3.3 system

C600G

5. After the disk boots and the Applesoft prompt appears insert your Super IOB disk and save the RWTS to it by entering:

BSAVE RWTS.SPARE MOMENTS, A\$1900, L\$800

6. Install the controller into Super IOB, run it and copy your original disk to your blank disk. Answer NO when asked if you want to INITialize the blank disk.

CONTROLLER

1000 REM SPARE MOMENTS 1010 TK = 3:ST = 0:LT =35:CD = WR1020 T1 = TK: GOSUB 490: GOSUB 360: ONERR GOTO 550 1030 GOSUB 430: GOSUB 100:ST = ST + 1: IF ST < DOS THEN 1030 1040 IF BF THEN 1060 1050 ST = 0:TK = TK + 1:IF TK < LT THEN 1030 1060 GOSUB 490:TK = T1:ST = 0: GOSUB 360 1070 GOSUB 430: GOSUB 100:ST = ST + 1: IF ST <DOS THEN 1070 1080 ST = 0: TK = TK + 1:IF BF = 0 AND TK < LT**THEN 1070** 1090 IF TK < LT THEN 1020 1100 HOME : PRINT "COPYODONE" : END 10010 IF PEEK (6400) < > 162 THEN PRINT CHR\$ (4) "BLOAD ORWTS. SPARE ○

Checksums

MOMENTS, \$1900"

1000-\$356B	1040-\$6342	1080-\$6CA2
1010-\$3565	1050-\$ABA3	1090-\$9DCA
1020-\$6170	1060-\$20C0	1100-\$9A4D
1030-\$7771	1070-\$28C5	10010-\$F9EC

7. Repeat steps 1-6 for side 2.

Softkey for...

Mr. Pixel's Cartoon Kit Mindscape

Requirements:

The original disk A blank disk COPYA from your DOS 3.3 system master Copy II Plus

This disk is on the most wanted list, (I should know, I asked for it to be put there.)

If you look at this disk with a nibble editor you will see that the only thing that has been

changed on the disk is the epilogues. They have been changes to FF FF from the normal DE AA. Well, this should be easy, I thought. I used COPYA after telling it to ignore checksums and epilogues but when I booted the copy I got a re-boot after it read the first couple of tracks. Hmmm, the dreaded nibble count. I scanned the disks for BD 8C C0 and found it in several places on the disk. The area of track \$02, sector \$04 was the area I was suspicious of and after putting in a return at the beginning of the track the disk worked fine.

Step-by-step

master and at the Applesoft prompt enter:

POKE 47426,24 RUN COPYA

- 2. Copy your original to your blank disk.
- 3. Make the following sector edit.

<u>Trk</u>	<u>Sct</u>	<u>Byte</u>	From	<u>To</u>
\$02	\$04	\$00	A9	60

4. Write the sector back to the disk.

Note: If you want to see what putting the 60 does make another copy of your original and on the same track and sector put EA's from address \$00-\$76. At address \$77 you will see a 60 there. On the original disk, after the nibble count is satisfied, the routine winds up at the 60 which tells the program to go back where it came from, before it started the nibble count. When we put the 60 at the beginning of the nibble count we did the same thing, at the start of the routine, that was done at the end of the routine.

Softkey for...

Treasure Island **Below the Root**

Windham Classics

Requirements:

The original disks

- 4 blank disk sides for Treasure Island
- 2 blank disk sides for Below the Root

Any fast copy program that can ignore read errors

I'm not completely sure, but it seems that these two programs are not protected. I got them for \$6.99 each and the disks seem different than what has been said about the Windham Classic programs in any of the issues of Computist. I have tried both of these games and although I haven't completed either of them I have gotten a good way into each of the programs and they seem to work fine. If anyone has these programs and they have the same bad tracks on them I would appreciate them writing in if they have found out different than what I have said.

Treasure Island

1. Fast copy all four sides of Treasure Island and ignore the following read errors.

Side A - no errors

Side B - tracks \$02 and \$03

Side C - tracks \$02 to \$0D Side D - tracks \$02 to \$0B

Below the Root

1. Fast copy both sides of Below the Root and ignore the following read errors.

Side A - tracks \$03 and \$04 Side A - tracks \$0A to \$10

Side B - no errors

Advanced Playing Technique for...

Heavy Barrel

Requirements:

A deprotected copy A sector editor

Make the following sector edits to side 1 of your copy to make your man invincible.

<u>Trk Sct Byte</u> <u>From</u> <u>To</u> \$04 \$09 \$21-23 CE E0 FE EA EA EA

Advanced Playing Technique for...

Expedition Amazon

Penguin

Requirements:

A deprotected copy A sector editor

I did this about 2 years ago, (when I wasn't too sure what I was doing), but maybe this will be of some help to someone.

Note: All of the sector edits shown here are to be done to side 2 of your copy.

You will find the prices for the equipment on track \$0B, sector \$02, starting at byte \$83 and on track \$1A, sector \$05 starting at byte \$00.

To modify the amount of money you have, the amount of equipment you have, how many lives have been lost, etc. sector edit the following areas.

<u>Track</u>	$\underline{\mathbf{Sector}}$
\$02	\$0 D
\$06	\$09
\$16	\$00
\$18	\$06
\$1F	\$OC

It appears that the disk writes back to two of the five tracks at random so you will have to write down your current stats and check all five of the areas until you find the two that contain the current stats. Once you play the game, as your stats are written back to the disk, if you decide to edit them again they will probably not be on the same track and sectors that they were before.

Softkey for...

Where in North Dakota is Carmen Sandiego

Broderbund

Requirements:

The original disk 2 blank sides Copy II Plus

- 1. Fast copy both side of your original disk to your blank disks
- 2. Make the following sector edit.

<u>Trk</u>	<u>Sct</u>	<u>Byte</u>	From	<u>To</u>
\$00	\$06	\$43-79	D0 F4 BD 8C	A9 FC 85 F0
			CO 10 FB C9	85 F3 85 F6
			E7 D0 4A BD	A9 EE 85 F1
			8C CO 10 FB	85 F2 85 F5
			C9 E7 D0 41	A9 E7 85 F4
			BD 8D CO AO	85 F7 EA EA
			10 24 80 BD	EA EA EA EA
	,		8C CO 10 FB	EA EA EA EA
			88 F0 32 C9	EA EA EA EA
			EE DO F4 EA	EA EA EA EA.
			EA AO 07 BD	EA EA EA EA
			8C CO 10 FB	EA EA EA EA
			99 FO 00 EA	EA EA EA EA
			88 10 F4	EA EA EA

3. Write the sector back to the disk so you don't have to reenter all of this again.

Softkey for...

Stellar 7

Pengiun Software

Requirements:

The original disk

A blank disk

COPYA from your DOS 3.3 system master

Copy II Plus

This disk carries the same protection as a lot of the other Penguin programs do. Looking at the disk with a nibble editor shows that the first byte of the address header changes on every other track from D5 to D4 and the address and data epilogues are DA AA instead of the normal DE AA.

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

RUN COPYA

2. After COPYA loads press CONTROL-C. This will stop the program. Now enter:

70 **CALL-151**

B954:29 00 this tells DOS to ignore the first byte of the address header

B993:00 this tells DOS to ignore the first byte of the address epilogue

B925:18 60 this tells DOS to ignore the data epilogues

3D0G RUN

- 3. Copy your original disk to your blank disk.
- 4. Make the following sector edits to your copy.

<u>Irk</u>	Sct	<u>Byte</u>	<u>From</u>	10
\$00	\$02	\$9E	DA	ĎΕ
\$00	\$03	\$35	DA	DE
\$00	\$03	\$91	DA	DE
400	400	AF4 F0	44 40 04 D0 FF	00 D

\$00 \$03 \$54-58 4A 49 6A DO EF C9 D5 D0 F0 EA

5. Write each sector to the disk before going to the next sec-

Softkey for...

The Writing Workshop Milliken

Requirements:

The original disks 11 blank disk sides DOS 3.3 system master Copy II Plus

Super IOB v1.5 A way to reset inti the monitor The controller shown below A blank initialized slave disk

Since there are quite a few disks in this program let's get rid of a few of them quickly.

Fast copy the following disks to some of your blank disks.

File Cabinet Disk

Postwriting Spelling Checker Disk 1

Postwriting Spelling Checker Word List

Mechanics Checker Word List Help Disk

Now for the remaining disks.

1. Boot your DOS 3.3 system master and after the Applesoft prompt appears put in one of your blank disks and enter:

INIT BOOT DELETE BOOT

Label this disk Word Processing and put it aside.

2. Make a change so that the rest of the disks will be initialized to BRUN the boot file.

CALL-151 9E42:34 3D0G

3. Initialize the rest of the disks. **INIT BOOT**

DELETE BOOT

- 4. Boot the original Word Processing disk and at the Applesoft prompt reset into the monitor.
- 5. Move the RWTS to a safe place by entering:

1900<B800.BFFFM

6. Put in your slave disk and enter:

C600G

7. After the disk boots and the Applesoft prompt appears insert your Super IOB disk and save the RWTS to it by enter-

BSAVE RWTS.WRITING WORK-SHOP, A\$1900, L\$800

- 8. Install the controller into Super IOB, run it and copy your original Word Processing disk to your blank disk that you labeled Word Processing. Answer NO when asked if you want to INITialize the blank disk.
- 9. Repeat step 8 for the remaining disks. You can use the RWTS that you captured from the first disk for the other disks.

CONTROLLER

1000 REM THE WRITING WORKSHOP.CON

1010 TK = 3:ST = 0:LT =35:CD = WR

1020 T1 = TK: GOSUB 490: GOSUB 360: ONERR GOTO

1030 GOSUB 430: GOSUB 100:ST = ST + 1: IF ST <DOS THEN 1030

1040 IF BF THEN 1060 1050 ST = 0:TK = TK + 1:IF TK < LT THEN 1030 1060 GOSUB 490:TK = T1:ST

= 0: GOSUB 360 1070 GOSUB 430: GOSUB

100:ST = ST + 1: IF ST < DOS THEN 1070

1080 ST = 0: TK = TK + 1:IF BF = 0 AND TK < LT **THEN 1070** 1090 IF TK < LT THEN 1020 1100 HOME : PRINT "COPY◊ DONE" : END 10010 IF PEEK (6400) < > 162 THEN PRINT CHR\$ (4) "BLOAD ORWTS. WRIT

Checksums

INGOWORKSHOP, A\$1900"

1000-\$356B	1040-\$6342	1080-\$6CA2
1010-\$3565	1050-\$ABA3	1090-\$9DCA
1020-\$6170	1060-\$20C0	1100-\$9A4D
1030-\$7771	1070-\$28C5	10010-\$B7D1

You are finally done!

Softkey for...

Steps to Comprehension Educational Publishing Concepts

Requirements:

The original Steps To Comprehension disks 8 blank disks DOS 3.3 system master A sector editor

I left out some sector edits in my softkey that appeared in issue 68 of Computist. I am repeating the entire softkey here with all of the sector edits.

1. Boot your DOS 3.3 system master and at the] prompt enter:

POKE 47426,24 ignore checksums and epilogues

RUN COPYA

- 2. Copy all 8 sides of your original to your blank disks.
- 3. Make the following sector edits to your copy of your master disk.

<u>Trk</u>	<u>Sct</u>	<u>Byte</u>	From	<u>To</u>
\$00	\$02	\$A3	DE	AA
\$00	\$03	\$3F	DE	AA
\$00	\$03	\$42	38	18

4. Write each sector back to the disk before going to the next

My apologies to whoever used my original softkey.

Softkey for...

Steps to Comprehension Password Repair Disk

Educational Publishing Concepts

Requirements:

The original Steps To Comprehension Repair disk A blank disk DOS 3.3 system master Copy II Plus

1. Boot your DOS 3.3 system master and at the] prompt enter:

POKE 47426,24 ignore checksums and epilogues

RUN COPYA

- 2. Copy your original to your blank disk.
- 3. Make the following sector edit to your copy. NOTE: Some of these edits might not be needed if the "TO" bytes are on vour convalready

У	our	copy	aiready.		
<u>Trk</u>	<u>Sct</u>	<u>Byte</u>	<u>From</u>	<u>To</u>	
\$00	\$03	\$42	38	18	
\$00	\$03	\$35	AA	DE	
\$00	\$03	\$91	AA	DE	
\$00	\$03	\$9B	DE	AA	
\$00	\$02	\$9E	AA	DE	
\$00	\$02	\$A3	DE	AA	

4. Write each sector back to the 1120 POKE 18025, 96: POKE disk before going to the next sector.

Softkey for...

Children's Writing and **Publishing Center**

The Learning Company

Requirements:

The original disks 5 blank sides

COPYA from your DOS 3.3 system master

Any fast copy program

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

POKE 47426,24 RUN COPYA

- 2. Copy side 1 of your program disk to a blank disk.
- 3. Use any fast copy program to copy the remaining sides to the rest of your blank disks. That's it.

Softkey for...

Cut and Paste

Electronic Arts

Requirements:

The original disk A blank disk Copy II Plus Super IOB v1.5

The controller shown below

The softkey in issue 13, page 26, of Computist wouldn't work with my copy of the program. I was able to modify the controller and get it to work. If your copy wouldn't work with it either then try this softkey.

- 1. Use Copy II Plus to format your blank disk.
- 2. Use the SECTOR COPY function of Copy II Plus to copy tracks \$00 to \$02 from your original to the disk you just formatted.
- 3. Install the controller into Super IOB, run it and copy your original disk to your blank disk. Answer NO when asked if you want to INITialize the blank disk.

CONTROLLER

1000 REM CUT AND PASTE.CON 1010 TK = 7:ST = 0:LT =35:CD = WR

1020 T1 = TK: GOSUB 490: IF TK > 3 THEN RESTORE : GOSUB 210

1030 GOSUB 430: GOSUB 100:ST = ST + 1: IF ST <DOS THEN 1030

1035 IF TK = 2 THEN GOSUB 210

1040 IF BF THEN 1060 1050 ST = 0: TK = TK + 1:IF TK < LT THEN 1030 1060 GOSUB 490:TK = T1:ST = 0: GOSUB 230: IF TK =

0 THEN GOSUB 1110 1070 GOSUB 430: GOSUB 100:ST = ST + 1: IF ST < DOS THEN 1070

1080 ST = 0: TK = TK + 1:IF BF = 0 AND TK < LT **THEN 1070**

1090 IF TK < LT THEN 1020 1100 HOME : PRINT "COPYO DONE" : END

1110 POKE 19015,170: POKE 19025,173: POKE 18024,24

18026,235: RETURN 62010 DATA 213,187,207

Checksums

1000-\$356B 1040-\$2C83 1090-\$37F7 1010-\$3F61 1050-\$8A4C 1100-\$E224 1020-\$237A 1060-\$6A59 1110-\$E706 1030-\$357B 1070-\$625C 1120-\$C6D2 1035-\$AADA 1080-\$F5DA 62010-\$0042

4. Make the following sector edits to your copy.

<u>irk</u>	<u>Sct</u>	<u>Byte</u>	<u>From</u>	10
\$02	\$03	\$47	BB	AA
\$02	\$03	\$ 51	CF	AD
_				

Enjoy.

Softkey for...

Word-A-Mation

Sunburst Communications

Requirements:

The original disk

A blank disk formatted in Pro-DOS (format the disk with the volume name /WORK)

A ProDOS formatted disk with only ProDOS 8 and Basic System on it.

A blank work disk ProDOS Super IOB Copy][Plus

The controller listed below A way to reset into the monitor A normal ProDOS file

This Sunburst product will softkey very easily using Bill Jetzer's ProDOS Super IOB. You should have the ProDOS Super IOB, along with the support files, already on a ProDOS disk. These files can be found in issue 62 of Computist starting on page 31.

- 1. Boot the original disk and write down what version number of ProDOS is being used. Then when you see the Applesoft prompt press CONTROL-RESET to stop the boot.
- 2. Enter the following. The routine you will enter will move the entire language card, except for bank 2, into memory at \$8000.

CALL-151 300:AD 88 C0 A2 00 BD 00 D0 :9D 00 80 E8 D0 F7 EE 0A :03 EE 07 03 D0 EF AD 8A :C0 60 300G

If after doing 300G, and pressing RETURN the computer freezes just press CONTROL-RESET to get back to the Applesoft prompt and then enter CALL-151 to get back into the monitor.

3. If the ProDOS version on the original disk was 1.0 do this next step. If it was 1.1 or newer skip to step 4.

8000<A800.AEFFM

4. Put in the ProDOS disk that contains only ProDOS and Basic System and boot it.

5. At the Applesoft prompt put in the disk that contains Pro-DOS Super IOB and enter:

CALL-151

1900 < 8000.86FFM BSAVE DRVR.WORD-A-MATION, A\$1900, L\$700

Readers Data Exchange

6. Install the controller into ProDOS Super IOB, run it and copy your original disk to your blank work disk.

CONTROLLER

2000 REM WORD-A-MATION.CON 2010 BK = 2:LB = 279:CD =2020 GOSUB 380:CD = RS: GOSUB 30 2030 GOSUB 380:CD = WR:GOSUB 30 2040 BK = PEEK (BLK) +PEEK (BLK + 1) * 256: IF BK < LB THEN 2020 2050 A\$ = "DONE \Diamond WITH \Diamond COPY" 10010 PRINT CHR\$ (4): "BLOAD ODRVR. WORD-A-MATION, A\$1900"

Checksums

2000-\$DF03 2030-\$7703 10010-\$DEC6 2000 REM READ, WRITE & 2010-\$E75A 2040-\$9DF2 2020-\$F719 2050-\$FFF2

- 7. Use Copy][Plus to copy all of the files, except for the Pro-DOS file, from the copy you just made to your blank, Pro-DOS formatted disk. Next copy a normal ProDOS file onto the disk you just copied all of the files onto.
- 8. Rename the disk to the same volume name as the disk that was made with the ProDOS Super IOB.

You're all done.

Softkey for...

Read, Write & Publish D.C. Heath

Requirements:

The original disks

- A blank disk formatted in Pro-DOS (format the disk with the volume name /WORK)
- 4 additional blank disk sides A ProDOS formatted disk with only ProDOS 8 and Basic System on it.

A blank work disk ProDOS Super IOB

Copy][Plus The controller listed below A way to reset into the monitor

A normal ProDOS file This program will also softkey very easily using Bill Jetzer's ProDOS Super IOB.

- 1. Boot the original disk and write down what version number of ProDOS is being used. Then when you see the Applesoft prompt press CONTROL-RESET to stop the boot.
- 2. Enter the following. The routine you will enter will move the entire language card, except for bank 2, into memory at \$8000.

CALL-151 300:AD 88 C0 A2 00 BD 00 D0 308:9D 00 80 E8 D0 F7 EE 0A 310:03 EE 07 03 D0 EF AD 8A 318:C0 60 300G

If after doing 300G, and pressing RETURN the computer freezes just press CONTROL-RESET to get back to the Applesoft prompt and then enter CALL-151 to get back into the monitor.

3. If the ProDOS version on the original disk was 1.0 do this next step. If it was 1.1 or newer skip to step 4.

8000<A800.AEFFM

4. Put in the ProDOS disk that contains only ProDOS and Basic System and boot it. **C600G**

- 5. At the Applesoft prompt put in the disk that contains Pro-DOS Super IOB and enter: **CALL-151**
- 1900 < 8000.86FFM **BSAVE DRVR.READ, WRITE &** PUBLISH, A\$1900, L\$700
- 6. Install the controller into ProDOS Super IOB, run it and copy your original disk to your blank work disk.

CONTROLLER

PUBLISH. CON 2010 BK = 2:LB = 279:CD =

2020 GOSUB 380:CD = RS:

GOSUB 30 2030 GOSUB 380:CD = WR:

GOSUB 30 2040 BK = PEEK (BLK) +PEEK (BLK + 1) * 256: IF

BK < LB THEN 2020 2050 A\$ = "DONE \Diamond WITH \Diamond COPY"

10010 PRINT CHR\$ (4): "BLOAD ODRVR. READ, OWRITE **◊&\$PUBLISH, A\$1900**"

Checksums

2000-\$DF03 2030-\$7703 10010-\$D048 2010-\$E75A 2040-\$9DF2 2020-\$F719 2050-\$FFF2

- 7. Use Copy][Plus to copy all of the files, except for the Pro-DOS file, from the copy you just made to your blank, Pro-DOS formatted disk. Next copy a normal ProDOS file onto the disk you just copied all of the files onto.
- 8. Rename the disk to the same volume name as the disk that was made with the ProDOS Super IOB.
- 9. Use any fast copy program to copy both double sided data disks.

You're finished.

Softkey for...

Muppet Word Book

Sunburst Communications

Requirements:

The original disk

- A blank disk formatted in Pro-DOS (format the disk with the volume name /WORK)
- A ProDOS formatted disk with only ProDOS 8 and Basic System on it.

A blank work disk ProDOS Super IOB Copy][Plus

The controller listed below A way to reset into the monitor A normal ProDOS file

Here is still another Sunburst product that will softkey easily using ProDOS Super IOB.

- 1. Boot the original disk and write down what version number of ProDOS is being used. Then when you see the Applesoft prompt press CONTROL-RESET to stop the boot.
- 2. Enter the following. The routine you will enter will move

the entire language card, except for bank 2, into memory at \$8000.

CALL-151 300:AD 88 CO A2 00 BD 00 D0 308:9D 00 80 E8 D0 F7 EE 0A 310:03 EE 07 03 D0 EF AD 8A 318:C0 60 300G

If after doing 300G, and pressing RETURN the computer freezes just press CONTROL-RESET to get back to the Applesoft prompt and then enter CALL-151 to get back into the

3. If the ProDOS version on the original disk was 1.0 do this next step. If it was 1.1 or newer skip to step 4.

8000<A800.AEFFM

4. Put in the ProDOS disk that contains only ProDOS and Basic System and boot it. **C600G**

5. At the Applesoft prompt put 3. Boot your slave disk. in the disk that contains Pro-DOS Super IOB and enter:

CALL-151 1900 < 8000.86FFM **BSAVE DRVR.MUPPET WORD**

BOOK, A\$1900, L\$700

6. Install the controller into ProDOS Super IOB, run it and copy your original disk to your blank work disk.

CONTROLLER

2000 REM MUPPET WORD BOOK 2010 BK = 2: LB = 279: CD =2020 GOSUB 380:CD = RS:GOSUB 30 2030 GOSUB 380:CD = WR:GOSUB 30 2040 BK = PEEK (BLK) + PEEK (BLK + 1) * 256: IF BK < LB THEN 2020 2050 A\$ = "DONE \Diamond WITH \Diamond COPY" 10010 PRINT CHR\$ (4): "BLOAD ODRVR.MUPPET OWORD O BOOK, A\$1900"

Checksums

2000-\$DF03 2030-\$7703 10010-\$3425 2010-\$E75A 2040-\$9DF2 2020-\$F719 2050-\$FFF2

- 7. Use Copy][Plus to copy all of the files, except for the Pro-DOS file, from the copy you just made to your blank, Pro-DOS formatted disk. Next copy a normal ProDOS file onto the disk you just copied all of the files onto.
- 8. Rename the disk to the same volume name as the disk that was made with the ProDOS Super IOB.

You're all done.

Softkey for...

The Labeler

Sophisticated Software

Requirements: The original disk

A blank disk DOS 3.3 system master A way to reset into the monitor Copy][Plus

A blank initialized slave disk with no HELLO program

In this softkey I will tell you how to deprotect this disk on a //gs with the ROM revision 01 and on a 128K //e, //c, or //gs

with the original ROM, (if when you first turn on your //gs it has 01 at the bottom of the screen you have the revision, if it doesn't have anything at the bottom of the screen it is the original ROM.)

For the //gs with revision 01 ROM do the following.

1. Boot your DOS 3.3 system master and at the Applesoft prompt put in your blank disk and enter:

INIT HELLO DELETE HELLO

- 2. Use Copy][Plus to copy all of the files from your original disk to your initialized disk except the HELLO file.
- 3. Boot your original disk. After the program loads reset into the monitor and enter:

1/800 < 0/800.4000M

O/AF.BO write down what the two bytes are at AF and B0

C600G

4. When you get the Applesoft prompt enter:

CALL-151

0/800 < 1/800.4000M

0/AF: ?? ?? replace the ?? ?? with the two bytes that you wrote down

hold down the CONTROL key, press the C key and then press RE-**TURN**

5. Put in the disk that you copied the files to and enter:

SAVE HELLO

That's it.

For the //gs with the original ROM, //c, and a 128K //e do the following.

1. Boot your DOS 3.3 system master and at the Applesoft prompt put in your blank disk and enter:

INIT HELLO DELETE HELLO

- 2. Use Copy][Plus to copy all of the files from your original disk to your initialized disk except the HELLO file.
- 3. Boot your slave disk. At the Applesoft prompt enter:

PR#3 **CALL-151**

0:8D 03 C0 8D 05 C0 4C 00 C6 4. Put in your original disk and

5. When the drive stops press (CTRL) reset and enter:

CALL-151 300:18 4C 11 C3 3F8:4C 00 03

800 < 800.3FFF (CTRL) Y don't type "ctrl Y", hold down the CONTROL key, press the Y key and then press return

AF < AF.BO CTRL Y CTRL C

6. Put in the disk that you copied the files to and enter: **SAVE HELLO**

That's it.

Softkey for...

Microzine #27 Scholastic

Requirements: The original disks 4 blank disk sides

tem master

Any fast copy program

The protected disk has altered epilogues and the first byte of the address header changes on every other track from D5 to D4.

- 1. Fast copy both sides of disk one. This disk is not protected.
- 2. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

CALL-151

B942:18 ignore checksums and epilogues B954:29 00 ignore the first byte of the address header

3D0G

RUN COPYA

3. Copy both sides of disk 2 to two blank disk sides.

No other changes are necessary.

Softkey for...

M-ss-ng L-nks English Editor M-ss-ng L-nks Classics Old and New

M-ss-ng L-nks Young Peoples Literature **Word Quest** A Wrinkle in Time The Puzzler

High Wire Logic Getting Ready to Read and Add

Sunburst Communications

Requirements:

The original disk

A blank disk for each program DOS 3.3 system master Demuffin Plus

A way to reset into the monitor A blank INITialized slave disk

These Sunburst titles can be deprotected by using Demuffin Plus and the RWTS of the protected disk to read the files on the original disk then write the information back to your blank

1. Boot your DOS 3.3 system master and INITialize your blank disk by entering the following.

Note: Not all of the programs use the same greeting program name so check the following list.

For:

M-ss-ng L-nks English Editor

INIT HELLO@ DELETE HELLO@

For:

M-ss-ng L-nks Classics Old and

M-ss-ng L-nks Young Peoples Literature

A Wrinkle in Time High Wire Logic

Getting Ready to Read and Add

INIT LOGO DELETE LOGO

For: Word Quest The Puzzler

INIT HELLO DELETE HELLO

2. Boot your original disk and reset into the monitor after the Applesoft prompt appears.

COPYA from your DOS 3.3 sys- 3. Move the RWTS to a safe 1030 GOSUB 430: GOSUB place, so it won't be destroyed when you boot your slave disk, by entering:

6800<B800.BFFFM

- 4. Boot your slave disk **C600G**
- 5. Put in your Demuffin Plus disk and enter

CALL-151 gets you into the monitor **BLOAD DEMUFFIN PLUS,A\$803**

FF59G if you hear a beep ignore it B800<6800.6FFFM moves the protected RWTS back to its original location

A851G 803G

reconnects DOS starts Demuffin Plus

5. Put your original disk in and copy all of the files to your blank initialized disk. When asked to put in a file name . enter = and when asked if you want prompting answer N.

Softkey for...

Computers in Government Writing an Opinion Paper **Polls and Politics Energy House**

Student Stories

Ducks

Pets, Ltd

Classification Volume 1 **Health Maintenance Volume 1 Health Maintenance Volume 2**

MECC

Requirements:

The original disk(s)

A blank initialized disk for each

A blank initialized slave disk Super IOB v1.5

A way to reset into the monitor The controller listed below

To deprotect these MECC titles we will use Super IOB with the Swap Controller and use the RWTS of the protected disk to read the original disk then use a normal RWTS to write the information back to your blank disk.

1. INITialize your blank disk(s) **INIT HELLO DELETE HELLO**

- 2. Boot your original disk and at the Applesoft prompt reset into the monitor.
- 3. Move the RWTS to a safe place by entering:

1900<B800.BFFFM

4. Put in your slave disk and enter:

C600G

5. After the disk boots and the Applesoft prompt appears insert your Super IOB disk and save the RWTS to it by enter-

BSAVE RWTS.MECC, A\$1900, L\$800

6. Install the controller into Super IOB, run it and copy your original disk to your blank disk. Answer NO when asked if you want to INITialize the blank disk.

CONTROLLER

1000 REM MECC.CON 1010 TK = 3:ST = 0:LT =35:CD = WR

1020 T1 = TK: GOSUB 490: GOSUB 360: ONERR GOTO 550

100:ST = ST + 1: IF ST <DOS THEN 1030 1040 IF BF THEN 1060 1050 ST = 0:TK = TK + 1:IF TK < LT THEN 1030

1060 GOSUB 490:TK = T1:ST = 0: GOSUB 360 1070 GOSUB 430: GOSUB 100:ST = ST + 1: IF ST <

DOS THEN 1070 1080 ST = 0:TK = TK + 1:IF BF = 0 AND TK < LT

THEN 1070

1090 IF TK < LT THEN 10201100 HOME : PRINT "COPYODONE" : END

10010 IF PEEK (6400) < > 162 THEN PRINT CHR\$ (4) "BLOAD ORWIS.MECC, A\$1900"

Checksums

1000-\$356B	1040-\$6342	1080-\$6CA2
1010-\$3565	1050-\$ABA3	1090-\$496E
1020-\$6170	1060-\$20C0	10010-\$2D2E
1030-\$7771	1070-\$28C5	

Softkey for...

Creature Creator Designware

Requirements:

The original disk

A blank disk

A sector editor that has search capability

Any fast copy program

- blank disk.
- 2. With the sector editor make the following edit to your copy.

Trk Sct Byte <u>To</u> **From** \$00 \$03 \$64-65 A5 1E A9 F0

4. Write the sector back to the disk

Softkey for...

The Flying Carpet Learning Technologies

Requirements:

The original disk A blank disk COPYA from your DOS 3.3 sys-

tem master A sector editor

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter:

POKE 47426.24 RUN COPYA

- 2. Copy your original to your blank disk.
- With the sector editor make the following edit to your copy.

Trk Sct Byte <u>From</u> <u>To</u> \$11 \$00 \$01 03 \$20 \$02 \$75-76 D0 ED 18 60

4. Write the sector back to the disk

Softkey for...

Let's Go Fishing Learning Technologies

Requirements:

The original disk A blank disk COPYA from your DOS 3.3 system master

A sector editor

RUN COPYA

1. Boot your DOS 3.3 system master and at the Applesoft prompt enter: **POKE 47426,24**

blank disk. 3. With the sector editor make

the following edit to your copy.

2. Copy your original to your

<u>To</u> Trk Sct Byte **From** \$11 \$00 \$01 03 11 \$09 \$09 \$75 DO ED 18 60

4. Write the sector back to the disk

Softkey for...

Fun from A - Z **MECC**

Requirements:

The original disk A blank disk A sector editor

Super IOB v1.5

The controller shown below

1. Install the controller into Super IOB, run it and copy your original disk to your blank disk. Answer YES when asked if you want to INITialize the blank disk.

CONTROLLER

1000 REM FUN FROM A - Z 1010 TK = 0: LT = 1: ST =15:LS = 15:CD = WR:FAST= 1

1020 GOSUB 430: GOSUB 490: GOSUB 610:T1 = TK:TK =PEEK (TRK):TK = T1

1. Fast copy the original to your 1030 GOSUB 430: GOSUB 490: GOSUB 610: IF PEEK (TRK) = LT THEN 1050

> 1040 TK = PEEK (TRK) : ST =PEEK (SCT): GOTO 1020 1050 TK = 1: LT = 35: ST =15:LS = 15:CD = WR:FAST

= 1 1060 RESTORE : GOSUB 190: GOSUB 210: GOSUB 430:

GOSUB 490: GOSUB 610 1070 GOSUB 230: GOSUB 430: GOSUB 490: GOSUB 610: IF PEEK (TRK) = LT THEN

1080 TK = PEEK (TRK):ST = PEEK (SCT): GOTO 1060 1090 HOME : PRINT "COPYODONE" : END

5000 DATA 170,213,173,

213, 150, 170

Checksums

1000-\$356B 1040-\$AB41 1080-\$1C99 1010-\$EA41 1050-\$A4EA 1090-\$A212 1020-\$9224 1060-\$36FF 5000-\$083D 1030-\$A1B2 1070-\$03CB

2. Make the following sector edits to your copy.

Sct Byte <u>Trk</u> <u>From</u> <u>To</u> AA \$00 \$02 \$58 96 \$00 \$02 \$5D AA AD \$00 \$02 \$F1 96 AA \$00 \$02 \$FC AA AD \$00 \$03 \$55 AA **D5** \$00 \$03 \$5F D5 AA \$00 \$03 \$6A 96 AD D5 \$00 \$06 \$7A AA D5 AA \$00 \$06 \$7F \$00 \$06 \$84 AD 96

3. Write each sector to the disk before going to the next sec-

The Basics of Kracking

Part #16

Softkey for...

Kameari

Ado-Soft (Japan)

Both because Mr. KRAC-MAN was generous enough to send me an original of the program, and because the original puckman was the first real protected disk I ever broke, it was fun to get my hands on the new "super puckman", or Kameari. It turned out to be not quite as hard to break as the first one, but it provided some interesting challenges.

If you catch the program at the right point, it's small enough to fit in a normal DOS BFILE, so we won't get to go through the theory and practice of program packing on this one. The sequencing used to load the game and access the disk later is a little unusual, and would have been tougher if they hadn't made a few mistakes.

A first-stage boot trace reveals the first interesting trick—the contents of \$814-\$8FF are eXclusive-OR'ed (XOR) with the address low byte and stuffed into page one with some cute code:

0801-	LDX	\$26	
0803-	TXS		en a a se e latya
0804-	DEC	\$27	
0806-	LDA	(\$26),Y	
0808-	EOR	\$26	
080A-	TSX		
080B-	PHA		
080C-	DEC	\$26	
080E-	CPX	#\$14	
0810-	BNE	\$806	
0812-	RTS		

Now, this is not bad for the first part of a protection scheme, because it requires a reasonable knowledge of the DOS boot process as well as 6502 stack/page one usage. The tricks are:

- •You have to know (or guess) that \$26 contains 0 and \$27 contains 9 after the first stage boot.
- •You have to understand how the indexed, indirect load works at \$806.
- •You need an understanding of the TSX and TXS instructions.
- •You need to interpret the final RTS correctly.

(If you know all these, skip this explanation and go on to the meat of the protection scheme below).

In the order listed above, location \$26 contains 0 from the boot ROM at location \$C652, where the accumulator was stored there after calling the "WAIT" routine at \$FCA8 (acc = 0 on exit from "WAIT"). Location \$27 is the high byte of the

two-byte storage pointer, and it is incremented from \$08 to \$09 in case there's more than one sector to load in on the first stage boot. LDA (\$26),Y means look at the location pointed to by \$26 and \$27, add the contents of the Y-register to it, and load the accumulator with the contents of that location: If \$26=32, \$27=08, and the Yreg=17, the address is \$832 + \$17, or \$849. Next, as those of you who stayed awake through the description of the stack and stack pointer in the Arcade Machine file will recall, the TSX and TXS instructions refer to transferring a byte between the -> stack pointer<- and the X-register, not between the stack and the register.

The first byte fetched from \$26 through the X-reg is used to initialize the stack pointer at \$00, meaning that the next byte pushed on the stack will be placed in location \$100. Since the stack pointer is a nine bit hardware register with the most significant bit set, it will always contain a value between \$100 and \$1FF. If you "push" (PHA) another byte onto the stack, it goes not into \$FF, but into \$1FF. Successive bytes go into \$1FE, \$1FD, etc. This is known as "stack wraparound", and was used by IDSI in their "JUGGLER" protection, among others. After the first time through, each byte from \$8FF down to \$814 is exclusive-ored with the address low byte (\$FF-\$14), and pushed on the stack in the corresponding location from \$1FF to \$114. Each time through, the stack pointer is loaded into the X-register to compare it with number #\$14 to find out if enough bytes have been transferred. When \$14 is found, they do an "RTS". this takes the two bytes above the stack pointer, increments the low byte, and places them into the program counter. The program continues to run at the new location (a variation of "jumping through the stack").

The new starting location is \$116 (it may seem a little strange to execute code out of what is normally the stack page, but there's nothing illegal about it. Applesoft, in fact, has a short subroutine called "CHRGET" at \$B1-C8 in zero page!). Briefly, the program runs a checksum on \$120-\$1FF to make sure those nasty Krackists haven't changed anything, then clears all of memory from \$800-\$B7FF. After setting up the screen to view Hires Page two (so you can't see the read routine loading in across the text screen memory), track 0 of the disk is searched for the byte sequence "DD AD DA." Astute readers of this column will recall that this is the old Sirius trademark, and just the beginning of the rip-off of Sirius protection techniques used by the publisher (apparently, it's all right to plagiarize code from a competitor's pro-

tection scheme, but not to make backup copies of software protected with the stolen code!). The real loader program is loaded into \$400-\$7FF (remember Cyclod and Friends?), and after checking for a single epilog byte of \$EE on the track, we do a checksum on zero page and jump to \$400 with the checksum byte in the accumulator. The old "4+4" nibblizing from SIRIUS is used, and the program is contained in a single record which is \$800 nibbles long and follows sector 0, which is in normal DOS format, on track 0 (the nice things about 4+4 nibblizing are that individual bytes can be located and changed, as described in the "WAY OUT" file, and the number of nibbles is always exactly equal to twice the number of bytes in the record).

At \$400, the checksum of zero page is repeated and compared (they only need to be the same), and there is a bunch of language card deprotection and checking of the reset and NMI vectors. If any of the checks fail, an error message is printed and the illegal opcode \$12 is executed to cause the system to hang. True to the SIRIUS heritage, the loader then fills up memory by reading tracks \$1-\$D (twelve pages each) into \$0800-\$A3FF, using an address marker of "DD AD DA" and the \$EE epilog byte. After jumping to \$612, the main screen is moved from \$8000-\$9FFF to \$4000-\$5FFF, and the main program is entered at \$800. Source code for the reader is shown below:

ORG \$0579

	Oila	400.0	
	STA	\$05	;destination
	PHA		;high byte
	LDY	H03FE	;Number of
•	STY	\$06	;pages to read.
	LDY	#\$00	;Clear destination
	STY	\$04	;low byte.
	LDX	H03FF	-
H0588	LDA	HC08C,X	;Begin to search
	BPL	H0588	for the "DD AD DA"
H058D	CMP	#\$DD	;sequence.
	BNE	H0588	•
H0591	LDA	HC08C,X	
	BPL	H0591	
	CMP	#\$AD	
	BNE	H058D	
H059A	LDA	HC08C,X	
	BPL	H059A	
	CMP	#\$DA	
	BNE	H058D	;After header,
H05A3	LDA	HC08C,X	get the first
	BPL	H05A3	;nibble, set the
	SEC		;carry, rotate
	ROL		;left, and store
	STA	\$0F	it in \$0F.
H05AC	LDA	HC08C,X	Get the second
	BPL	H05AC	;nibble: AND it
	AND	\$0F	;with the first.
	STA	(\$04),Y	;Store complete
	INY	V. 1.	;byte and go on
	BNE	H05A3	to the next.
	INC	\$05	;Dest'n address
*	DEC	\$06	;Page counter
	BNE	H05A3	•
H05BE	LDA	HC08C,X	;Check for
	BPL	H05BE	;epilog byte
	CMP	#\$EE	· • • • •

BNE H0578 PLA

At this point, all the program resides in \$0000-\$8000, so it's a good place to interrupt and save it. It seems strange that, with all the other SIRIUS-type protection, there's no checksum on the loader, so we can go in and change bytes on a copy of the disk. It's easy to copy the disk by using Nibbles Away with an address marker of "DD AD DA" for tracks \$0-\$E, but you can actually get by with only copying track 0 onto a separate disk (NA or Locksmith will both copy it without parms, since there is a standard DOS 3.3 sector on it). There is no disk error handling, so a disk with only track zero on it just sits and spins, allowing you to remove it and insert the original to load in tracks \$1-\$D. As in days of old, read in track zero using the track editor from Nibbles Away, then type "Z" to make it analyze the track. Set the display to the pointer page with "G6800", then search for the string "AA EE AA AA AE AA", which is "4C 00 08" or "JMP \$0800" in 4+4 nibblize. Change this to "AE EE AE FB FF FF", which means "JMP \$FF59", or "AE EE EE EF FF FE" which is "JMP \$FECD" for use with a KrakROM (the right one to use here is KRAKROM4, since \$2000-\$3FFF contains program code and \$4000-\$5FFF has only a Hi-Res picture). Write the altered track to a blank disk with the "W" command.

Boot the new disk, and when it spins, insert the original. after the normal load, the banner will be displayed for about 5 seconds before your modification at \$66E redirects the program into the monitor. Assuming that you used a Krakrom, the entire program is now contained in \$900-\$7FFF and can be saved as a BFILE after booting a slave diskette.

Modifications are easy now, and this is one set of "cleanup" activities that will bring the program into condition to BRUN:

Boot a slave disk, then move page 8 back from \$4800-\$48FF.

Move the stored zero page memory from \$4000-\$40FF to \$8000-\$80FF.

Write a memory move routine at \$8050 which will restore zero page to \$0-\$FF (see below). don't forget to set up Hi-Res page 2 and clear the keyboard strobe.

Replace the picture in \$4000-\$5FFF with one containing your own advertising (you can reset the original after the boot and save the picture as a binary file for modification).

Put "4C 50 80" or "JMP \$8050" at \$7FD to start the program. BSAVE KAMEARI, A\$7FD, L\$7880.

Move Routine (L\$38)

8050:A0 00 B9 00 80 99 00 00 \$9BD3 8058:C8 D0 F7 A2 60 9A AD 50 \$20B1 8060:C0 AD 55 CO AD 52 CO AD \$1A3A 8068:57 CO AD 10 CO A9 80 A2 \$C2AD 8070:60 A0 00 4C 00 08

Kameari Move Routine.src

TXTCLR	=	\$C050	
HISCR	=	\$C055	
MIXCLR	=	\$C052	
HIRES	= -	\$C057	
STROBE	=	\$C010	
	ORG	\$8050	
	LDY	#\$00	
H8052	LDA	H8000,Y	return zero;
	STA	H0000,Y	;page to \$0-FF
	INY		. •
	BNE	H8052	
	LDX	#\$60	;Set up stack
	TXS		pointer and
	LDA	TXTCLR	;graphics.
	LDA	HISCR	
	LDA	MIXCLR	
	LDA	HIRES	
	LDA	STROBE	
	LDA	#\$80	;Load up the
• ,	LDX	#\$60	registers.
	LDY	#\$00	, ,
	JMP	H0800	;Begin program
			g p g

The resulting program will run just fine until you clear a board and advance to the next level. At that point, the disk starts to spin and the system refuses to respond to any inputs. The reason is the instruction at \$B5C which jumps to \$403, which jumps to \$5D5:

-	ORG TYA PHA	\$05D5	
	LDY	#\$00	
	STA	H03FE	
H05DC	LDX	H03FF	
110000	LDA		;Start the drive
	LDA	#\$30	jotalt ino unio
	JSR		
	LDA		
	JSR		;Read the "track"
	LDX		;into 7F00-up.
	- LDA		;Stop drive
	LDA	#\$00	10.0p 00
	TAY		
H05F5	EOR	H7F00.Y	;Checksum 7F00-7FFF
	INY	•	•
	BNE	H05F5	
	CMP	#\$44	
	BNE	H05DC	
	JSR	H7F00	;Do subroutine
	LDY	#\$00	
H0604	CLC	·	
	ADC	#\$45	;Wipe out
	STA	•	the code so
	INY	•	it must be read
	BPL	H0604	;in each time.
	PLA		
	TAY		
	JMP	HOCE8	

This routine loads the single page contained on track \$E into \$7F00-\$7FFF, executes the subroutine at \$7F00, and mangles the code in page \$7F for good measure. By loading the code in once and nop'ing the mangle routine, you can avoid the unnecessary disk access and have a 122-sector KAMEARI program to use as you see fit. Change \$B5C from "4C 03 04" to "4C 80 1A", and put this short substitute routine at \$1A80:

Kameari Substitute Routine (L\$10)

1A80:98 48 20 00 7F 68 A8 4C \$CFE9 \$0919 1A88:E8 OC

Kameari Substitute Routine.src

ORG \$1A80 TYA PHA JSR H7F00 PLA TAY JMP HOCE8

Adding a "Pause" routine to Kameari

Advanced Playing Technique for...

Kameari

Ado Soft

Requirements:

Softkeyed version

Kameari is a decent enough Pacman, but it lacks the "pause" control with the escape key that's become standard in games from the U.S.A. You can add one by changing locations \$1717-1719 to "4C 40 14" (JMP \$1440), and adding this short routine at \$1440:

Pause Routine(L\$27)

1440:C9 9B F0 07 C9 CB D0 12 \$F532 1448:4C 5D 17 AD 10 CO AD 00 \$F676 1450:C0 10 FB C9 9B D0 F7 AD \$3DE9 1458:10 CO 60

Kameari Pause Routine.src

		4	
H175D	=	\$175D	
STROBE	=	\$C010	
KEY	=	\$C000	
	ORG	\$1440	
	CMP	#\$9B	;Was it "esc"?
	BEQ	H144B	
	CMP	#\$CB	;No, check for K
	BNE	H145A	;Nothing, so exit.
	JMP	H175D	;It was K, goto 175D.
H144B	LDA	STROBE	it was esc, clear
H144E	LDA	KEY	the strobe and
•	BPL	H144E	;wait for another
	CMP	#\$9B	,"esc" to be pressed.
	BNE	H144E	
	LDA	STROBE	;Must clear here!
H145A	RTS		

It's a pleasant bit of nostalgia to see someone using the old techniques with a new twist, and it provides us a chance to review some of the Kracking XXXX: YYYYdebug gives you these approaches that used to be # "State-of-the-Art." See you in a "bit" or so.

Unknown

IBM Softkey for...

Diagram Master v5.0

If you, like myself paid out your hard earned cash for diagram master only to find out it's install to hard disk will not work on any drive but C: (contrary to what their support staff says), Follow the following procedure and remove the silly copy protect altogether:

1. Make a copy of DM.EXE

2. Rename it to DM.XXX

3. Use DEBUG **DEBUG DM.XXX** D CS:3FC7

You should see the following: 75 68 ...

If not then you've got a different version than 5.0 and this won't work.

4. If you see 75 68, then **E CS:3FC7 EB 68**

W

Q **RENAME DM.XXX DM.EXE**

You now have a copy of Diagram Master without the copy protect.

IBM Softkey for...

Chessmaster 2000 v1.01

Kids, this one is real simple. The program disk has on it a hidden file which is formatted in weird and wonderful ways, ways that your common, ordinary, run of the mill copy programs can't handle. I wasn't even able to get CopyIIPC or CopyWrite to work on this one. But then, I have a strange homebrew computer. Anyway, the program CM.EXE on your Chessmaster disk looks for verify failures from these bizarre sectors, and when found, runs the program. If the sectors aren't found then the program runs as a demo, and shuts down after a few minutes (nice touch, more genteel than calling you a slimy bastard and disemboweling your hard disk).

- 1. Make a copy of the distribution disk using DISKCOPY. Ignore the dire warnings of unrecoverable read/write errors. The copy will have all normal DOS sectors, with all of the necessary files on it. Only the weird stuff won't get copied, but we don't need it. Put your original disk away in a nice safe place where the Thought Police won't get at it.
- 2. Rename the file CM.EXE to something like CM.XXX, so we can use DEBUG. Startup DE-BUG.

DEBUG CM.XXX

3. Search for the byte string B8 00 00 EB E7.

S 0100 FFFF B8 00 00 EB E7

This looks for a mov ax,0000 instruction that gets executed if the program fails to find the weird sectors.

4. Using the numbers from step 3, assemble a new instruction here to fool the program.

A XXXX:YYYY

XXXX:YYYY MOV AX,0001 XXXX:YYYY press <enter> key to exit

This instruction will return a code that indicates the presence of weirdness, when in fact the sectors are normal.

5. Write the program back to disk.

W Writing ZZZZZ bytes Q

6. Rename the file back to .EXE and you now have a copy of Chessmaster that will run from the hard disk, and that can be copied for archival purposes

IBM Softkey for...

The Dambusters Accolade

Use the following debug procedure. Note that even recent version versions of CopyIIPC cannot copy this software, and to protect your investment you will want to use this unprotect.

1. Copy DAMB.EXE to a formatted blank diskette. Then: REN DAMB.EXE DAMB.BIN **DEBUG DAMB.BIN**

2. Now search for the use of INT 13

S 0000 FFFF CD 13

I found this call at 13BC:0116 You may find it at a different location, but as long as the number ends in 16 you have the correct location. If it doesn't end with a 16 then you may have a different version and this unprotect may not work.

3. Next look at the code after this call

U xxxx:xx16 the number from above You should see the following:

XXXX:XX16 CD13 INT 13 XXXX:XX18 7306 JNB 0120

If this is different, you may have a different version. Stop

4. Now change the jump to an unconditional jump

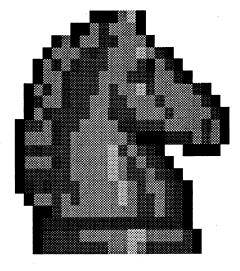
E xxxx:xx18 EB 06

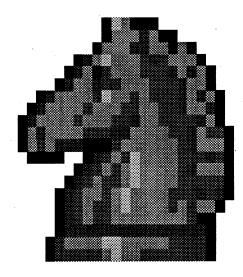
5. Now write the changes back to disk and end the debug session

W

REN DAMB.BIN DAMB.EXE

Now place your original diskette in a safe place.





unClassifieds

How to place an **UnClassified Ad**

Send a typed sample copy with appropriate instructions. (If possible, send text on a 5.25" Apple format disk.) Use up to 40 characters per line, we will adjust word

Special Graphics Instructions: The first three words of the first line are printed in bold for free. If you want other words bolded, use 5 characters less per line. Use 10 characters less per line if you have a lot of uppercase bold letters. Bold letters are wider than normal. If the typed copy does not show bold, circle the words you want bolded and, on the side, write BOLD. If you want a line centered, write CENTER next to that line. There is no charge for centering any line.

You must check your ad for errors, the first time it runs. Errors on our part will be corrected, then, for free. Errors or changes on your part will be charged a \$5 process-

*** New Rates (per line) *** Computist club member25¢ All others35¢

The minimum order is \$5.

- Our liability for errors or omissions is limited to the cost of the ad.
- We reserve the right to refuse any ad. Washington state residents add 7.8%
- Send a check or money order (funds drawn on US bank only) for the entire amount to:

COMPUTIST unCLASSIFIEDS 33821 East Orville Road Eatonville, WA 98328

WANTED

"Most Wanted List" Software

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Softkey hobbist is interested in acquiring copy protected software to deprotect. Good track record, many successful attempts. Original disk will be returned along with softkey for COMPUTIST. Especially interested in older software (pre-1988) but will give any disk a shot. I'm especially interested in:

> Drol --- Broderbund Serpentine --- Broderbund Spare Change --- Broderbund Wings of Fury --- Broderbund

Star Cruiser --- Sirius Space Eggs --- Sirius Falcons --- Picadilly

Microwave --- Cavalier System: Apple IIe, 128K. Send disk to:

> Rich Etarip 824 William Charles, Apt #2 Green Bay, WI 54304

For Sale:

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> Ronald H Stein 126 Roxbury Park East Amherst NY 14051

Wanted! Information

on Cracking IBM protection. Also software like Copywrite, Locksmith PC, Central Point Software's PC Option board and PC Watch. Also send list of Apple II items for sale.

> Joe Torzewski 51625 Chestnut Road

Apple II Nerd?

The **Ultimate** reference library! Complete Call A.P.P.L.E.! Complete InSider! Complete A+! Complete COMPUTIST All 10 Nibble Expresses! Many, many extras!

Shipping alone would cost a fortune. The highest bid received by year-end 1992 takes them all. Send to:

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For sale:

Applied Engineering RamKeeper.in good working order. Includes: cable, transformer, 5hr battery, manual and Appleworks expansion software. All reasonable offers will be considered.

> Kip Harker P.O. Box 600 Eagle River AK 99577

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Krakowicz.	
Jack R. Nissel	
Unknown	

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#84 The Product Monitor •Bugs: Another bug in

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