

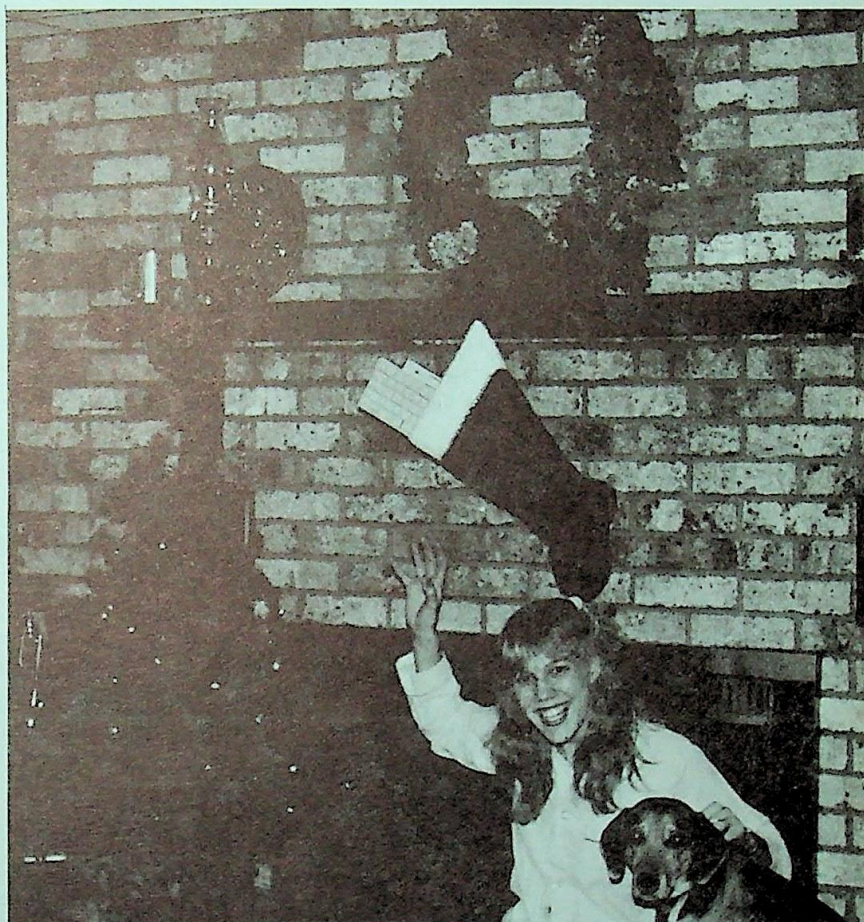
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November
December
1989

Volume 1
Number 2

The *First* Apple IIGS Magazine + Disk Publication!

- HO! HO! HO!
It's the *GS+* Christmas
Buyer's Guide
- Beginner's Guide to the
Finder
- 8 Reviews:
TML Pascal II
Source Code Library II
Cutting Edge Keyboard
Battle Chess
Dark Castle
Dungeon Master
Neuromancer
Laser Force
- EGOed - An NDA Text
Editor Complete With
TML Pascal II Source
Code On Disk



Plus:

More Graphics, Rumors &
Other Stuff You NEED To
Know About!

News on the Latest Updates:

AppleWorks GS v1.1
HyperStudio v2.0 &
System Software v5.02

GS+ is a hit! I'd like to take this opportunity to thank all of you out there that took a chance on us. If you took the time to show GS+ to your local User's Group, thanks again. An extra special thanks needs to go to the folks at Byte Works, Inc. (who showed our first issue at AppleFest in San Francisco) and America Online (who let us advertise all over the place). Thanks folks, we would not have made it this far without you. I also need to thank Noreen Ribaric. Noreen had never used AppleWorks GS (or any other page layout package) before, and within a week she had the design and layout of the first issue completed. I forgot to tell her to give herself credit for that in the first issue, and so I'll say thanks to her here. **THANK YOU NOREEN!** Can I please come back in the house now?

We've made a few cosmetic changes since last issue that we think you will like. But, as in the first issue, content, not form, is our main concern.

Once again, I think I will skip all of the "In This Issue" baloney and talk about something else. For the next few

months, all of us here in the Americas will be subjected to that great time of year known as "The Holidays." During this time, a great many computer owners will receive two very special gifts: Software and Time Off. In my case, the immediate impulse is to spend the Time Off playing with the Software. Ignoring friends and family, I have spent the last nine or ten Holiday seasons escaping into such fascinating pieces of Software as: Galaxy Invasion, Morlock's Tower, Bard's Tale, ORCA/Pascal, Mean 18 and Defender Of The Crown. What a waste. I realize now that I should have been spending that time with the people that care about me. This year, I'm going to unplug my computer from December 20th to January 2nd and use all my Time Off to visit with my family and create a few new memories with my friends. I hope you will do the same. All that Software will just have to wait for a cold day in January.

Have a great Holiday season!

Steven W. Disbrow

Guest Editorial

It's no secret that the Apple IIGS has a limited number of software titles available. It's also becoming distressingly evident that our rightful share of software is being choked off by publishers who are becoming almost totally MS-DOS oriented. This is a very disturbing thought, especially if you consider the amazingly large sum of money required to purchase an MS-DOS machine, and enhance it so the sound and graphics capabilities are equal to those we already have on the IIGS.

We've all heard the lame excuses the publishers have offered for refusing to give our machine the support it, and we, deserve. The majority of these publishers made their first dollars on the Apple II market. Seeing them turn their backs on the most powerful member of the Apple II family is infuriating.

We're faced with a dilemma, and decisive action is required. Some have suggested that an all-out boycott of the offending publishers is called for. I can't see this tactic succeeding. Refusing to buy any titles whatsoever

would only stir most publishers to terminate support for the IIGS entirely. A more viable option is to refuse to buy any more Iie or Iic titles for use on your IIGS, and demand IIGS-specific versions. This strategy may succeed, but may backfire as well. Some publishers may decide to stop supporting the entire Apple II family. What a dark day for computing THAT will be!

The strategy that I feel may work best is to let the publishers KNOW you want IIGS titles. If you see a good game on the shelf, buy it, send in your registration card, and demand more! **Absolutely, positively, refuse to circulate pirated software!** Write the publishers. Call the publishers. Sound off! Be polite and tactful. Nobody wants to hear an earful of profanity directed at them. If you're a member of a club, organize petitions. Most of all, do something! If all we do is sit back and wait, our machines are history.

Bryan Walker

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Trash Can Award inside back cover

GS+ is produced with an Apple IIGS using AppleWorks GS and an Apple LaserWriter IINT.

Steven Disbrow • Publisher, Editor
"He gets all the credit..."

Noreen Ribaric • Associate Editor, Layout
"...I do all the work!"

Screen graphics in this issue (and the last issue), were captured with a FingerPrint GSi card. The FingerPrint GSi was also used to freeze the screen so that the screen photographs could be taken. Thanks to Jami Lowery, Jeff Walker and Ray Ribaric for their help in taking the photos.

Opinions expressed in this publication are those of the individual authors and do not necessarily represent those of **GS+**.

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Steve,

I've been waiting years for a magazine like yours! A magazine that not only uses the GS (AppleWorks GS even . . . I take my hat off for you on this one . . .) for its format, but also isn't afraid to call a spade a spade. There hasn't been one since Softalk went under. Everyone I've shown the magazine to has thought it was super!

Scott Gentry
Fairfax, VA

Steve,

I got your magazine and enjoyed it a lot. I plan to subscribe and hope you make it with this. I plan to support it since nobody else seems to care about the GS. I applaud you and your partner.

P. Borrero
Travis AFB, CA

Sirs,

Well, I got my copy of *GS+* today, and I'll be as honest about it as the reviewers are about the products they discuss . . . *GS+* is *GREAT*! Maybe it is not *inCider* with thousands to spend, but it is quality. Information that is useful. Information that is funny! I laughed out loud at some of the jokes at least three times. It gave me a really good feeling about my GS . . .

Matt Ryan
Van Nuys, CA

Sir,

I think this is just great that somebody finally had the guts to come out with such a publication [GS specific magazine and disk]. I can only hope that you do great in your endeavor.

Patrick R. Kober
Milwaukee, WI

Dear Mr. Disbrow,

I am very happy to hear you are starting up a new magazine devoted to an excellent computer. We need more of your kind of effort to convince Apple (the company) and other vendors that there is strong support for the IIGS by its owners! I hope you are very successful.

Michael McConnell
Pennsville, NJ

Dear *GS+*,

I hope to see some coverage of AppleWorks GS in future issues. I am totally frustrated with this program. I have not even been able to keep it running for any length of time, [let alone] open two documents at the same time. It's a shame because this program really does have potential. I find it unbelievable that you actually produced your magazine with it.

The best of luck.

Karl W. Kunz
Carmel, CA

Actually, we also find it hard to believe that we were able to get the last issue finished using AWGS. This issue went a little better, but look for an article next issue on the woes of using AppleWorks GS and a few tips to making it a little easier to bear if you decide to stick with it!

Noreen Ribaric - Associate Editor.

If you have a question, comment, compliment, concern, or complaint that you would like to express, feel free to write to:

*GS+ Letters
c/o EGO Systems
P.O. Box 15366
Chattanooga, TN 37415*

Don't forget to send those AWGS tips and questions for next issue's article (we might even make it a department)! We look forward to hearing from you!

(What to Get the IIGS Fanatic)

Compiled by the GS+ Staff

All we ever seem to get for Christmas is sweaters, pants, jackets, shirts, socks, and underwear! Sheesh! Don't people realize that what every red-blooded computer owner wants for Christmas is stuff for his or her computer!

Well, if you have a special someone that owns a IIGS, this article will help you pick out a Christmas gift that he or she will really appreciate. Listed below are some of the best IIGS and Apple II products that have ever been released. All you have to do now, is find out which of these titles your recipient does not have and then go buy it!

(All titles are IIGS specific unless otherwise noted.)

Entertainment

1. Crystal Quest - Not Copy Protected.
2. Tetris - Copy Protected.
3. Arkanoid II - Copy Protected.
4. Mean 18 - Copy Protected.
5. Bard's Tale - Copy Protected.
6. Dungeon Master - Copy Protected.
7. Alien Mind - Copy Protected.
8. Thexder - Copy Protected.
9. Zany Golf - Copy Protected.
10. Rocket Ranger - Not Copy Protected.

Education

1. Where In The World Is Carmen Sandiego - Copy Protected.
2. Reader Rabbit - Copy Protected.
3. Anything from the Talking Sticky Bear series - Copy Protected.
4. Talking Math And Me - Copy Protected.
5. Typing Tutor IV - Copy Protected.
6. Math Blaster Plus - Copy Protected.
7. Geometry - Copy Protected.
8. Where in Europe is Carmen Sandiego (8 bit) - Copy Protected.
9. Where in the U.S.A. is Carmen Sandiego (8 bit) - Copy Protected.
10. Where in Time Is Carmen Sandiego (8 bit) - Copy Protected.

Productivity/Business

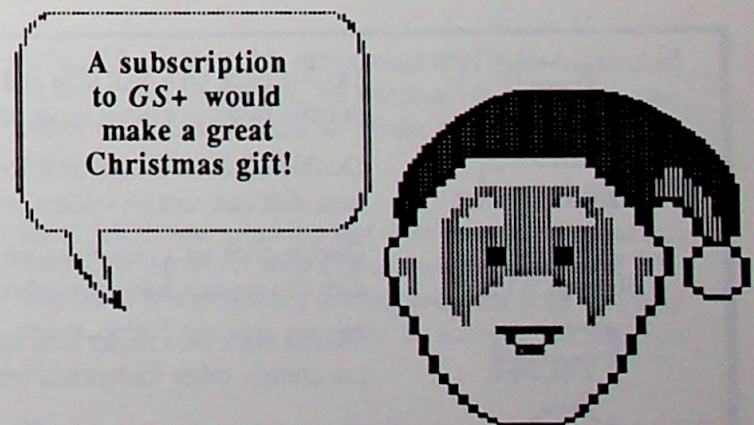
1. Original AppleWorks (8 bit) - Not Copy Protected.
2. Print Shop IIGS - Copy Protected.
3. BeagleWrite GS - Not Copy Protected.
4. America Online (formerly AppleLink Personal Edition) - Not Copy Protected. Requires a modem.
5. PaintWorks Gold - Not Copy Protected.
6. Diversi-Tune - Not Copy Protected.
7. Publish It! (8 bit) - Not Copy Protected.
8. Music Studio 2.0 - Not Copy Protected.
9. Word Perfect - Not Copy Protected.
10. AppleWorks GS - Not Copy Protected.

Really Bad Software

If you can't find any of the above titles, you may be tempted to buy something else. With a few exceptions, most other IIGS software is pretty good, so it is hard to go wrong. Listed below are four of these exceptions. Under no circumstances should you buy any of these four products. Buy a nice box of diskettes instead.

1. Gauntlet.
2. Paper Boy.
3. Tass Times In ToneTown.
4. Marble Madness.

Figure 1. Santa Sez . . .



Part 1 - by Steven W. Disbrow

One of the best, and most underrated, programs that is available for the IIGS is the Finder. Sure, it comes free with every new IIGS that is sold, but almost no one uses it! Most of the reasons that I have heard for this are that it is slow, hard to use, and that due to Apple's \$35 to \$50 upgrade charge, most users don't have the most recent manual. This is a real pity. Being able to use the IIGS Finder not only familiarizes you with other IIGS specific programs, it gives you experience with the concepts used in almost every other personal computer operating system on the market today. The Macintosh, Microsoft Windows, OS/2, the Atari ST and the Amiga (just to name a few) all use the same concepts and methods to handle almost duplicate tasks. Part 1 of this series is intended to give a basic overview of the Finder and its capabilities to those of you that don't have the manuals or suffer from FinderPhobia.

The Basics...

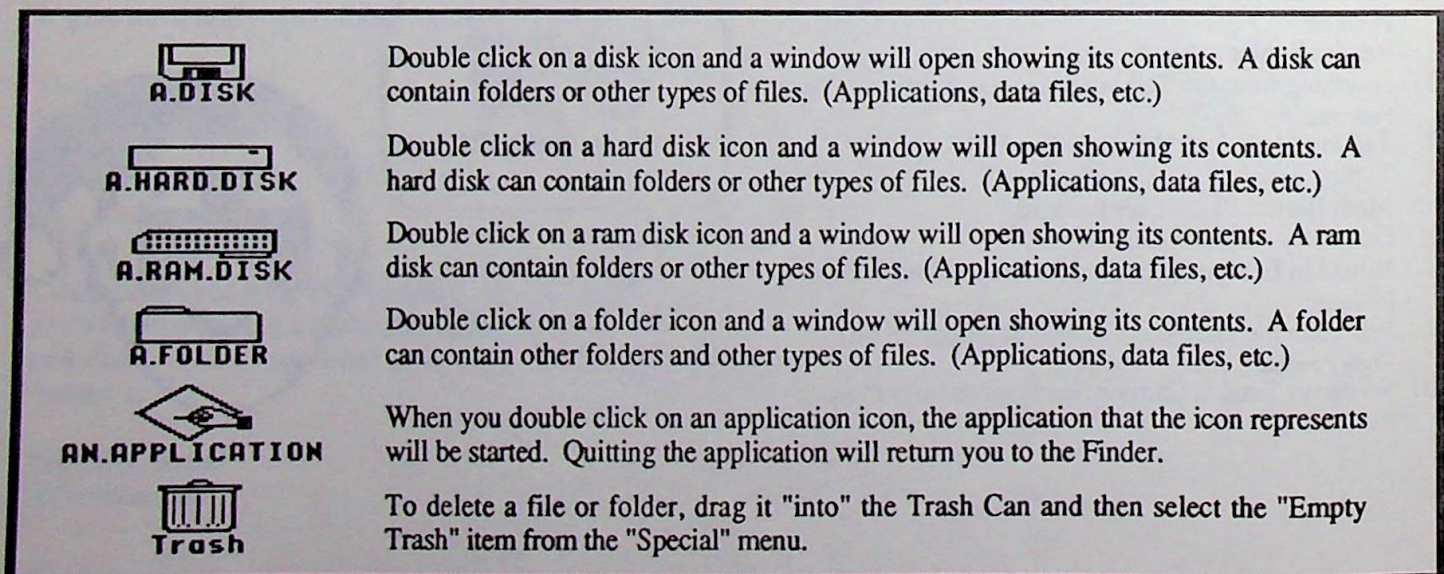
The operation of the Finder is based on what Apple Computer, Inc. likes to call, "The Desktop Metaphor." The Finder uses your IIGS screen to simulate the appearance and function of an actual desk. (OK. So it's not that good a simulation Very few metaphors hold up to close examination.)

In order to pull off this metaphor, the Finder uses pictorial representations, called Icons, to represent disks (also called "Volumes"), folders (also called "Directories"), programs (also called "Applications"), data files (also called "Documents"), devices (such as a Hard Disk, Scanner or CD-Rom player), and other items that appear on the Finder's desktop. (See Figure 1 for a list of the most common Icons and brief descriptions of their basic use.) The contents of disks and folders are displayed in windows. These windows help to logically group the icons representing the contents of the disk or folder that you are currently examining. You work with the items on the Finder's desktop by selecting them with the mouse and then choosing one of the actions available to you from the Finder's menu bar. That action is then carried out against the item or items that you have selected. For example, when you insert a disk in the disk drive, its icon will appear on the Finder's desktop. If you then select the disk (by clicking the mouse on it) and pick the "Open" item from the "File" menu, a window that shows the contents of the disk will open on the Finder's desktop.

So What Does It DO?

The Finder is a program that can perform a great many tasks. It contains a number of disk utilities that allow you to perform some of the most common disk maintenance tasks: formatting disks, erasing disks, duplicating files,

Figure 1.



deleting files, etc. However, the Finder is most commonly put to use as a Disk Navigator and Program Launcher. That is to say, the Finder is used to organize and examine the contents of your disks and run, or launch, any programs on your disks. When you quit the program you have run, you are automatically returned to the Finder. Since all programs that are run from the Finder automatically return to it, the Finder is an ideal program to start your IIGS with.

The Menus

Now that we've gone over the basic concepts and uses of the Finder, let's take a brief look at what is available in the Finder's menu bar.

In the Apple menu, you will find a minimum of two items. The first, "About the Finder...", will give you some information about the boys and girls that wrote the Finder. If you are using version 1.3 of the Finder, hold down the <shift> and <option> keys before you click on the Apple, and this item changes into "About the System...". The second item in this menu is "Help...". Selecting this item brings up a dialog box that gives you help with some of the Finder's less well-known features. Click on the particular item you want help with and then click the "OK" button. When you are finished helping yourself, click on the "Cancel" button. In addition to these two items, the Apple menu will also contain the names of any New Desk Accessories that you have installed on your start up disk. To run one of these NDA's, simply select it from the Apple menu.

The File menu contains eight items that are used to manipulate the files and windows on the Finder's desktop. Moving down the File menu, the items are:

New Folder - Selecting this item will create a new folder with the name "Untitled" in the currently active window. The currently active window is the one that is visible above all of the other windows on the Finder's desktop. If there are no windows open, this item can not be selected.

Open - Selecting this item will open the currently selected item(s). If the item is a disk, folder or the Trash Can, a window showing the contents of the item will open. If the item is an application, that application will be started.

Print - You must have a document icon selected to pick this item. If the application that created the document has been programmed to work with this feature, the Finder will start up the application and the application will then try to print the document. At present, very few applications support this feature of the Finder.

Close - Selecting this item will close the currently active window.

Close All - Selecting this item will close all open windows, whether they are active or not.

Duplicate... - When you select this item, the Finder will attempt to make a copy of all of the items that you have selected.

Put Away - Select this item when you want to retrieve a selected icon from the Trash Can or remove it from your desktop. The selected item will be returned to its proper disk or folder.

Validate - This item tells the Finder to check all of the selected icons for errors. If the Finder finds any errors it will present you with a list of the items that caused the errors.

The Edit menu contains seven items, only two of which are actually used by the Finder. The items "Undo", "Cut", "Copy", "Paste", and "Clear" are present only so that New Desk Accessories may use them. The other two items are:

Select All - Picking this item causes the Finder to select all icons in the currently active window. If no windows are open, the Finder selects all of the icons that are on the desktop.

Show Clipboard - Picking this item opens a window that shows the current contents of the system Clipboard. The Clipboard is a temporary holding area that is used to help move data from one program to another via the Edit menu.

The View menu contains six different options that let you decide how you wish the contents of the currently active window to be displayed. If no windows are open, none of the six options can be selected. The first two options,

"by Icon" and "by Small Icon" give you an unsorted view of the windows contents. The last four options sort the contents of the window by name, date, size, or kind.

The Disk menu allows you to perform one of the following actions on the disk that you currently have selected:

Initialize... - Pick this item only when you want to completely lose, for all time, the contents of the currently selected disk. When you first insert a new (unformatted) disk into the disk drive, the Finder automatically invokes this option so that it may format the disk for use.

Erase... - This option will also erase, for all time, the contents of the currently selected disk. However, this option only works with disks that have already been initialized.

Verify - This option checks the currently selected disk(s) for errors.

Eject - If the currently selected disk is a 3.5" disk, selecting this option will eject it from the drive it is in.

The Special menu contains all of the Finder options that just don't logically fit into any of the other menus. These five items are:

Clean Up - Selecting this option causes the Finder to arrange the contents of the currently active window along an invisible grid. This gives the windows contents a nice, orderly appearance.

Empty Trash - Picking this item tells the Finder to go ahead and actually delete all of the items that are in the Trash Can.

Preferences... - When you chose this item, you are presented with a dialog box that lets you tell the Finder how you want it to handle certain events.

Icon Info - Choose this item and the Finder will open up an information window for each icon that you have selected. The information contained in this window will be different depending on the kind of icon that the information is for. However, the information window will always contain the name of the icon that it is for. If the icon is a disk or a folder, there will also be a calculator

icon in the information window. If you click on the calculator icon, the Finder will calculate the size of the contents of the disk or folder.

Shut Down... - Select this item when you are finished using the Finder and want to restart or power down your IIGS or you want to return to the program that you ran the Finder from.

The Color menu is used to set the color of the icon(s) that you have selected. Simply select the icons you want to color and then choose the color you want from the Color menu.

Not Quite The End...

That about covers the bare-bones basics of using the IIGS Finder. If all you need to do is run programs and perform simple disk maintenance, the above information should hold you until next issue when we get into some of the more complex capabilities of the Finder. If you want to, go ahead and explore on your own. After all, that's the best way to learn any program!

Keyboard Shortcuts

You may have noticed that several of the items in the Finder menus are followed by a small apple symbol and a letter. This tells you that there is a Keyboard Shortcut for that menu item. To activate the keyboard shortcut for a particular item, you simply hold down the Open-Apple key (also know as the Command key) and press the indicated character key. For example, instead of pulling down the File menu and selecting the New Folder item with the mouse, you could simply press the Open-Apple and 'N' keys. Almost every IIGS and Macintosh program makes extensive use of keyboard shortcuts so be sure to check for them whenever you start using a new program.

by Michael J. Quinn

Welcome back! This issue, we will focus on how to draw faces with your IIGS. If you have already peeked at the faces on the disk, you should (hopefully) have recognized them as Donald Trump and George Harrison. These two pictures were created in two different styles. Donald Trump is a "Colored 3-Dimensional" picture, whereas George Harrison is a "Shaded 2-Dimensional" image. I did something different this issue with the pictures: I saved the pictures in different stages of their creation so you can get an idea of the process involved. The Donald Trump pictures are named "TRUMP1" through "TRUMP7." The George Harrison pictures are named "BEATLE1" through "BEATLE4." The highest numbered picture is the final product where each preceding number is one step earlier in its creation. The program I used to create these pictures is DeluxePaint II. The menu items I refer to in this article are from that program.

MR. TRUMP

Step 1. (The basic shape)

Before you begin drawing, you have to decide what colors you will use. The most detailed part of the picture should get the most colors assigned to it. Since the focus of the picture is the face, you should create several different skin tones. These are, by far, the most complicated colors to create. To create these colors, get a medium shade of grey (equal amounts of red, green, and blue). Add a little red and take away a little blue. Keep playing with this until you have a satisfactory color. Once you have created the basic skin tone (which should be towards the middle of the palette), choose the color a few blocks up and copy your original skin tone to it. Now darken this color to the darkest skin tone you expect to use by using the Intensity scroll bar in the Palette window. Now spread from this dark skin tone to the lighter one to give yourself some intermediate tones to work with (the more tones you have, the smoother the image will appear). This first step, drawing the basic shape of the face, is the simplest and the most crucial. The reason it is so crucial is because it's the framework of the whole picture. If you get this shape wrong, it becomes more difficult to redo the further into the picture you get. Make sure that you have the basic shape as well-defined as possible before continuing. Be

sure to use the darkest skin tone when creating the shape, and fill it in with this color.

Step 2. (Shading the face)

This process is very difficult and I will try my best to make it easy for you. In this step, you will be shading the face, trying to make it look round. To do this, choose the spray paint tool from the side bar or bottom bar (depending on which software you are using) after you have chosen the second darkest skin tone from the color bar. Spray everywhere on the face that is to be that color or lighter. At this point, you need to decide where the light source is coming from. For example, in the Trump picture the light source is coming from the right. Therefore, the lightest area of the face will be on the right side and the darkest on the left. Keep this in mind while spray painting. The colors should blend from dark to light as you go from left to right (if the light source is from the right). Once you have finished with this color, switch to the next lightest color and repeat this process until you have used the lightest color, all the while drawing less and less on the left. Keep it a little darker around where the eyes will be, and the mouth, and to the left of the nose.

Step 3. (The hair)

Choose about two to four shades of brown (or red, blond, or black) for the hair. Now, choose a brush made of two or three pixels and choose the lightest hair color. Draw lines (with the freehand draw tool) starting at the part of the hair and move away from the part. Repeat this

Mr. Trump after Step 4.



for several strands of hair. Draw slowly when you start at the part and eventually speed up as your brush moves away from the part. This will make the hair appear darker as you move away from the part. Keep doing this until you have given your face a full head of hair. Once you have finished this, use the smooth tool and a large brush (four to eight pixels) to run over the rough edges.

Step 4. (The neck and upper body)

You may now give your person some shoulders. Choose a color for the shirt and draw an outline of the person's shoulders. Choose a fairly dark shade of skin tone and draw the person's neck starting at the bottom of the chin. Fill in the neck with the dark skin tone and shade it just as you did the face. Now fill in the shirt with the appropriate color.

Step 5. (Nose and mouth)

This is one of the trickier parts. Choose a dark skin tone and use the freehand draw tool to draw the upper lip and fill it in. Now draw an outline of the bottom lip without connecting the right side (if the light source is coming from the right). You might want to draw a little bit of a shadow under and to the left of the bottom lip. Draw a partial outline of the nose (on the opposite side of the light source). Make this outline pretty thick because it will be the shadow of the nose. Now draw a small line under the nose to give it some definition. Depending on the age and expression of the individual you are drawing, you might want to draw some lines going from the corners of the mouth to the middle of the sides of the nose. Once you

Mr. Trump after Step 7.



have this completed, choose the smooth tool again and a four- to eight-pixel brush and smooth those ragged edges.

Step 6. (The eyes)

This is the most difficult part. The eyes are usually what gives a face its identity. This could mean the difference between making the face look like Marilyn Monroe or Freddy Kruger! The first thing I would do is draw the eyebrows (using a fairly dark skin tone). Here's a hint: female's eyebrows are a little bit higher and thinner than a man's. Be sure to smooth the edges when you are done. The eyeballs themselves usually have a dark line around them. After the basic eye shape is drawn, fill it in with white and use black to draw in the pupils. Remember that it's usually darker under the eyebrows than under the eye itself, and the surrounding area of the eye is darker than the rest of the face because this area is sunk into the face.

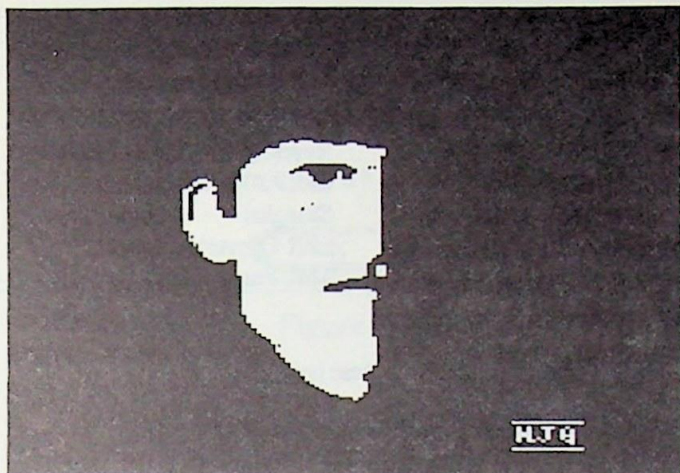
Step 7. (Final touch-ups)

Smooth out a few parts, add a little more detail, and there you have it! Your very own masterpiece! Now you can save it, print it, and show it to all your friends. No? Well don't be discouraged, no one becomes Rembrandt overnight! But you can keep practicing until you come up with a REAL masterpiece.

GEORGE HARRISON

Step 1. (The basic shape)

This picture presents a completely different (and easier) way of drawing a face. This one is in black and white (so it shouldn't be too difficult creating a palette for this one). The basic building block of the whole picture is a solid white outline. In this image, the light source is coming directly from the left, so no light shines on the right side. Therefore, only the left half of the picture, or right side of the face, needs to be drawn. Just choose the color white and draw an outline of half of the face and fill it in. Use black to draw in the upper lip and add some curves to the chin so you can tell it has some shape to it. One important part of drawing a face is the little dimple above the lip that everyone has and almost nobody notices (unless it's not there). Be sure to add that. Draw the top line of the eye and the dark corner by the nose. Next draw in the pupil. For the ear, just draw an ellipse, keeping it narrower at the bottom. The bottom of the ear should be at about the same level as the bottom of the nose. Draw a black curved line near the upper left inside the ear lobe.



George Harrison after Step 2.

Step 2. (Pre-Shading)

In this stage of the drawing, you will be using some pre-shading techniques. At places where there should be faint lines and light shadows, you will draw thin black lines and small checkerboard patterns, respectively.

Near the center hole of the ear, there should be a slight blending of light to dark. The best way to accomplish this is to draw a small checkerboard pattern, and then later use the smooth tool to produce the shading (this will be done in step 3). After you have drawn the checkerboard for the center hole, you might want a slight shadow defining the outer ear lobe, so you could draw a thin line (one pixel thick) near the outer edge of the lobe.

The eye needs more definition than just the top line. Draw a dotted line under the eye (leaving one or two pixels of space under the pupil) to bring out the lower lid. Most faces have some kind of depth or bags under the eyes. A good way to show this is to draw a thin line under the eye.

A similar line near the lower part of the nose will help bring some depth to the cheek. Add a small checkerboard pattern near the corner of the nose so it won't look flat. Fill in a small wide line for the nostril and another checkerboard on the underside of the nose. If you want the lower lip to show up, give it a thin dotted underline.

The chin should be shaded as well. Add another checkerboard to the chin, making it thicker toward the darker side and less dense near the lighter side. To separate the face from the neck, draw a thin black line.

Step 3. (Shading)

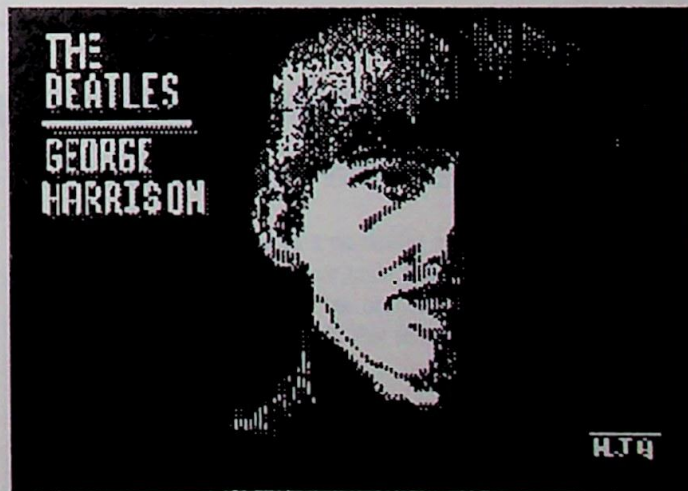
Now to make it look realistic. Smooth all the rough edges, thin lines, and checkerboards. Here's a hint on shading: the more you want a line to stand out, the smaller your smoothing brush should be. Use a larger brush with the checkerboard patterns. If your shading doesn't turn out as dark as you would like, draw another black checkerboard over the already-shaded area. If it turns out too dark, draw a white checkerboard over it and reshade. The same goes for the lines. If they are not dark enough, draw another one over it and reshade. If it is too dark, draw a white line (or a dotted line) over it and reshade.

Step 4. (The hair)

This step is easier than it looks! Choose a brush with about three to five dots (separated pixels). If your paint program has a shade tool, USE IT NOW! In DeluxePaint II, this tool is under the Mode menu. This does wonders for creating hair. Be sure you have the freehand draw tool and draw back and forth along where the strands of hair should be. Like magic, strands of hair should appear before your eyes! The more you go over one place, the lighter that section will become. Remember where the light source is coming from. You don't want to lighten the whole head if the whole head is not lit.

I hope this article has been helpful. If you have any questions, comments, praises, or gripes, send them to me, Michael Quinn, care of GS+ magazine.

George Harrison after Step 4.



EGOed is written in TML Pascal II, copyright 1989 TML Systems, Inc. Certain portions of this software are copyrighted by TML Systems, Inc.

by Steven W. Disbrow

OK, so you've just bought this really HOT new game and you want to get right to it. You pop the disk in the drive, it comes up in the Finder and there, on the disk, is a text file called, "Read.Me.Or.Die". What to do, what to do . . . ? The Finder does not give you any way to directly read or print a text file, so You start up AppleWorks (or worse yet, AppleWorks GS) and go through the horrid process of importing a text file just to read this stupid text file that you did not want to read in the first place.

This issue's program, EGOed, is a New Desk Accessory (NDA) text editor that allows you to create, edit, read, and print text files. Files can be printed on your ImageWriter or LaserWriter printer in any of your available fonts. Since EGOed is an NDA, you can use it from within just about any program that supports NDA's (See "Take A Letter..." sidebar).

Installing EGOed

EGOed works only with System Software v5.0 and later. This means that your system must have at least 512K of memory (but more is better). It WILL NOT WORK with System Software v4.0! This is because several of the tools required by EGOed (the Text Edit tool set and Resource Manager in particular) do not exist in System 4.0. To install EGOed, use the Finder to copy it from the file :GSP.V1.N2:EGOed:EGOed on your GS+ disk

Take A Letter...

EGOed has been found to work with the following programs:

AppleWorks GS	FutureSound
Cartooners	HyperStudio v1.2 & v2.0
ComputerEyes	ORCA/Desktop
DeluxePaint II	Shanghai
DicED v1.1	SHR Convert v2.1
DrawPlus	TML Pascal II v1.1
Finder v1.3	

EGOed does not work with these programs:

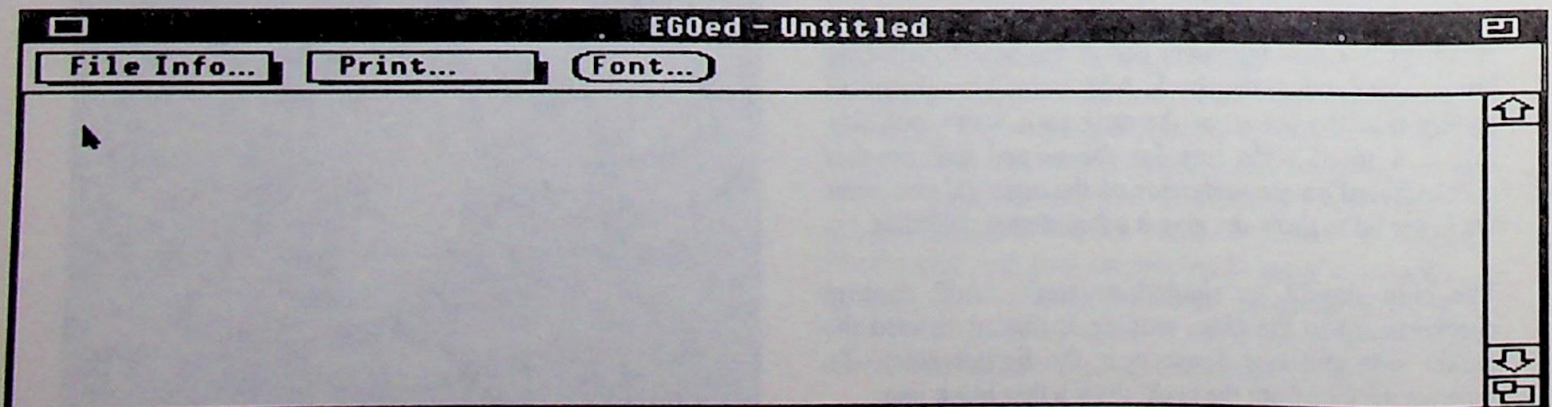
GraphicWriter 2.0	Reach For The Stars
-------------------	---------------------

to the **System:Desk.Accs:** folder of your startup disk. Due to a couple of shortcomings in the Resource Manager, you should NOT rename the EGOed file! Once you have the file copied, you must restart your IIGS to make EGOed available from the Apple menu.

Using EGOed

To use EGOed, simply select it from the Apple Menu at the upper left hand corner of the screen. After a few seconds, the EGOed window will appear (see Figure 1). At this point you can just start typing, but you probably want to know what all of those buttons and arrows in the window are for, so let's take a second to look at each of them. Beneath the window's title bar are two pop-up menus and a simple button. These are EGOed's main controls. The first pop-up menu has a default value of "File Info..." and contains several other selections that allow you to open, save, and get information on the current file. To select an item from this menu, move the

Figure 1.



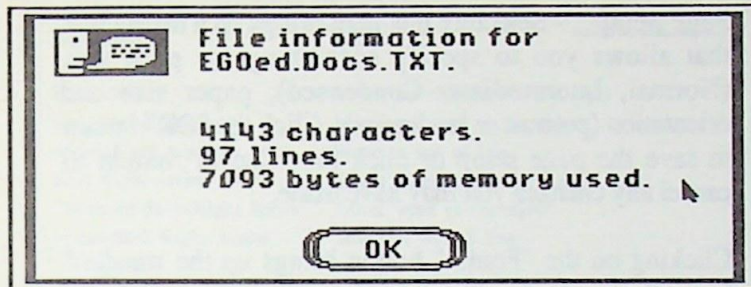


Figure 2.

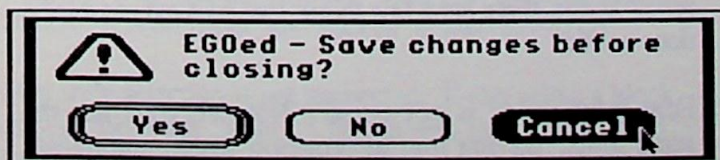
mouse over it and press and hold down the mouse button. This will cause the complete menu to "pop up" into view. While still holding down the mouse button, drag the mouse down the menu until the option you wish to invoke is highlighted. The options available in this pop-up menu are:

File Info... - This is the default option for this menu. It tells you the name of the file you are working on, the number of characters in the file, the number of lines in the file (EGOed wraps text so this value changes when the width of the window changes), and the total amount of memory that the file is taking up (see Figure 2). To exit this option, click on the "OK" button or press the <return> key.

New - Selecting this item will clear out the file currently being edited and present you with an empty window to begin typing a new file into. If the current file has been changed since it was last saved, you are given a chance to save the changes you have made. Click the "Yes" button to save your changes, the "No" button to lose the changes, or the "Cancel" button to cancel the "New" command and resume editing the old file (see figure 3).

Open - Selecting the "Open" item brings up a Standard File dialog box that allows you to search all of your on-line disks for a text file to edit. If the current file has been changed since it was last saved, you are given a chance to save the changes you have made before opening the new

Figure 3.



Watch Out!

EGOed makes extensive use of the new features in System Software 5.0. This means that EGOed also trips up on a lot of the bugs and "features" in System Software 5.0. Here are a few potentially dangerous situations you should be aware of:

If you are not running EGOed from a Hard Drive, **MAKE SURE** that you swap disks when you are told to do so. The Resource Manager only brings in EGOed's resources (the EGOed window and menus) when absolutely necessary. If your startup disk is not on-line when these resources are called for, the Resource Manager will ask you to insert your startup disk so that it may load these resources. If you do not supply the disk, the computer will usually crash with an "Unable To Load/Unload Resource" error. I highly recommend that you run ANY application or Desk Accessory that uses resources from at least 2 disk drives and keep your startup disk on-line at all times. And don't forget to ask Santa for a Hard Disk! You really do need one!

I can not duplicate this error with much regularity, but I'll mention it anyway. Dragging the EGOed window near the bottom of the screen (so that only the title bar and the pop-up menus are showing) and trying to use either of the pop-up menus sometimes causes the aforementioned "Unable To Load/Unload Resource" error.

Make sure you choose your printer (with the Control Panel NDA) before you try to print for the first time! This applies to ANY application running under System 5.0, not just EGOed.

There is a bug in the Text Edit tool set that can cause your system to crash if you try to Cut, Paste or Copy a large (4K or more) block of text.

If you select either the "File Info..." or "About EGOed..." items and the expected dialog box does not appear, click in the close box to save your work and close EGOed! Do not click on the "Print..." menu button! If you do, you will probably get another "Unable To Load/Unload Resource" error and have to restart. Once you have closed EGOed, you should be able to open it again and everything should be back to normal. This problem only seems to occur after you edit a large file and is probably related to a bug in the current version of the Resource Manager.

If you try to run EGOed in a particular program and receive an "Out Of Memory" error (error code \$0201) save your work, a crash is probably just around the corner. The only program I've had this problem with is Reach For the Stars, but there may be others.

Due to limitations in the current version of the Resource Manager, you must not rename the EGOed file!

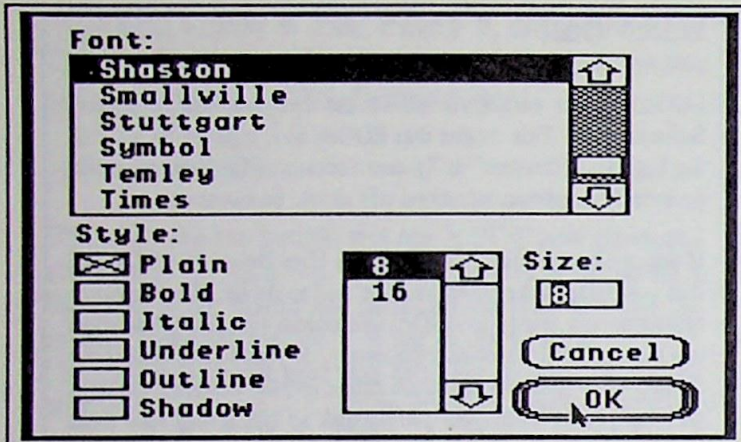


Figure 4.

file. Click the "Yes" button to save your changes, the "No" button to lose the changes, or the "Cancel" button to cancel the "Open" command and resume editing the old file (see figure 3 on page 11). Note that if you do not save your file at this point and then click the "Cancel" button in the Standard File dialog, you will lose your old file and be presented with an empty window (just as if you had selected the "New" item and then chosen not to save your changes).

Save - Selecting this item will save the current contents of the file you are editing. If the file you are editing is named, "Untitled" (the default name for a new file) you will be presented with a Standard File dialog that will let you specify a new name to save the file under.

Save As... - This option lets you save the current edit file under a different name.

About EGOed... - This item presents you with a dialog box containing the obligatory copyright information about EGOed. Click on the "OK" button or press the <return> key to return to the edit window.

The second pop-up menu works exactly like the first and contains two selections that allow you to control the printing of the current contents of the EGOed window:

Print... - This is the default selection. This item presents you with a standard print job dialog that allows you to specify which page(s) to print, print quality, etc. (See the "Watch Out!" sidebar on page 11 for more information on printing and other hazards.) Click the "OK" button to print or click the "Cancel" button to cancel printing.

Page Setup... - Selecting this item brings up a dialog box that allows you to specify such things as print size (Normal, Intermediate, Condensed), paper size and orientation (portrait or landscape). Click the "OK" button to save the page setup or click the "Cancel" button to cancel any changes you may have made.

Clicking on the "Font..." button brings up the standard font selection dialog box (see Figure 3). Once you have the desired font and size selected, click on the "OK" button or click on the "Cancel" button to cancel the font change. If you click "OK" and you had a block of text selected (See Figure 5 on page 13 for a list of text selection keys) that block of text will be changed to the font and size you selected. If you did not have any text selected, all text that you type at that point will be shown in the new font and size. Please note that the font information you specify is NOT saved when you save the text file. See the "EGOed Limitations" section below for the reasons why.

Now that you know what all of the buttons do, the rest is fairly simple. You type in your text and save or print it. However, there are a few other things you should know about that might save you some keystrokes. As was said earlier, EGOed makes use of Apple's new Text Edit tool set for all of its editing chores. Using this tool set automatically gives EGOed all of the most common (and necessary) features that you expect in a text editor. These are summarized in Figure 5. At this point, we know of only two commercial text editors that use this tool set (the TML Pascal II editor and EGOed), but it's safe to assume that a great many others will follow in the near future. Also, since the Text Edit tool set was created by Apple, it's safe to assume that these same commands will work with most Macintosh programs as well.

In addition to the editing features in Figure 5, EGOed also makes use of the "Cut", "Copy", "Paste", and "Clear" items in the Edit menu (if there is one) of the currently executing application.

EGOed Limitations

EGOed was intended to be a simple text file editor. As a result of this, there are a few things that EGOed can not or does not do:

Font information is not saved - Not everyone has the same fonts. Saving font information would complicate

Key Stroke	Action
Right Arrow	Move one character to the right
Command-Right Arrow	Move one word to the right
option-Right Arrow	Move to end of line
Shift-Right Arrow	Select character to the right
Command-Shift-Right Arrow	Select word to the right
option-Shift-Right Arrow	Select to end of line
Left Arrow	Move one character to the left
Command-Left Arrow	Move one word to the left
option-Left Arrow	Move to start of line
Shift-Left Arrow	Select character to the left
Command-Shift-Left Arrow	Select word to the left
option-Shift-Left Arrow	Select to start of line
Down Arrow	Move down one line
Command-Down Arrow	Move to last line in window
option-Down Arrow	Move to end of file
Shift-Down Arrow	Select down to same column in next line
Command-Shift-Down Arrow	Select down one page
option-Shift-Down Arrow	Select to end of file
Up Arrow	Move up one line
Command-Up Arrow	Move to first line in window
option-Up Arrow	Move to top of file
Shift-Up Arrow	Select up to same column in previous line
Command-Shift-Up Arrow	Select up one page
option-Shift-Up Arrow	Select to top of file
Delete	Deletes character to the left of the insertion point or all selected text
Clear	Deletes all selected text
Control-y	Deletes all characters to the end of the line
Control-f	Deletes character to the right of the insertion point or all selected text
Control-x	Cuts current selection onto clipboard
Control-c	Copies current selection onto clipboard
Control-v	Replaces selected text with contents of the clipboard
Option-Space Bar	Inserts a "Sticky Space" between two words that you do not want split up over separate lines.

Figure 5.

the sharing of text files created with EGOed and push EGOed into the realm of the Word Processor. Font support was added simply because Shaston looks HORRIBLE on paper, and because it was easy to do.

Font style selection is not supported: If you select a block of text, click on "Font..." button and then select Bold, Italic, 12 Point Times, the text will be changed to 12 Point

Times, but the Bold and Italic styles will not be visible and will not show up when printed.

AppleWorks Files can not be edited - The reason for this is simple, I do not know the format of an AppleWorks (GS or Classic) word processor file. If someone will write in and tell me how to read them in, I'll put this capability in the next version.

UNDO is not supported.

You must use the Control Panel NDA to select a printer.

So, Change IT!

EGOed is a complete, low-end text editor that has already made MY life much simpler. But, of course, there are a thousand things that it could still use. That is why you will find all of the source code to EGOed (complete with extensive comments) on your GS+ disk. Some easy stuff that you might want to try adding would be: changing the cursor to an "I-beam" when it is over the EGOed window or support for a single UNDO. A little bit tougher would be: search and replace capabilities or a simple on-line help dialog. Those of you with a thing for pain and memory to burn could try adding: a spelling checker, background printing, or the ability to save the font information.

I really hope that you enjoy this program. I especially hope that the source code helps everyone get up to speed with programming the Text Edit tool and the Resource Manager. Vince at TML Systems told me that Apple told him not to even try doing a NDA that uses Resources. But, he gave me a few pointers and wished me luck anyway Thanks Vince!

Books You Need

If you REALLY want to take advantage of System 5.0 in your IIGS programs you need to get a copy of the Apple IIGS Toolbox Reference Volume 3. It's only \$35 from the Apple Programmers and Developers Association (APDA) and it's worth every penny.

Membership in APDA costs \$20 a year and you must be a member to order this and other IIGS technical references. The service is not the best in the world (it's pretty lousy actually), but it's the only place to get this kind of detailed information on the IIGS. To join APDA, call 1-800-282-APDA.

Compiled by Prof. G.S. Gumby

Stop the Presses!

On October 30, Claris announced AppleWorks GS version 1.1! For more information about the upgrade, call Claris at 1-800-544-8554. Since this announcement came right as we were going to press, we have placed the text of the announcement on your GS+ disk. It is in the file "AWGS.News." You can use EGOed or any other text editor to read it.

SlugFest?

Although we could not make it personally to AppleFest, our spies tell us that it was pretty lame . . . except for the fist fight that nearly broke out between Bill Mensch (designer of the 65816 CPU used in the IIGS) and Jean-Louis Gassée (Apple V.P.). We have only a third hand account, but it seems to have been over the fact that Mr. Mensch said, out loud, and in front of a large audience, that he could give Apple large quantities of 12 MHz 65816 CPU's, but that Apple just was not interested in them.

PC Tools GS?

Central Point Software is said to be working on a new, IIGS specific, version of Copy II. Hopefully this will be a version of PC Tools Deluxe for the IIGS. Speedy backup and restore, hard drive optimization, . . . we can dream can't we?

Thanks for the Memory?

Is it just us, or does everybody think Apple missed the memory mark on the new IIGS? If you want to run AppleWorks GS or PaintWorks Gold, you still have to buy somebody's memory card . . . 1 megabyte just isn't enough! Actually, the fault lies with people that write sloppy software. But, that's another story

Finally!

The people that bring you SoftDisk, Big Blue Disk and all those other Disk-only type magazines finally introduced a version just for the IIGS! SoftDisk G-S! Why the hyphen? Apparently Apple was going to sue them Don't they make enough money? Anyway, if you want more information, contact:

SoftDisk G-S
606 Common St.
Shreveport, LA 71101
1-800-831-2694

Hernia II?

A GS Portable? No, we don't believe this one either. But, this is a rumor that has been alive for quite some time. With the introduction of the Mac Luggable It could happen.

Horrors!

Cinemaware bought out by Electronic Arts? What will this mean to Cinemaware's already minimal IIGS development efforts?

Fasten Your Seatbelts!

Have you noticed that there are almost no flight simulators for the IIGS? (Tomahawk is the only one we know of.) That could soon change in a big way. We understand that a certain developer of flight simulators is interested in securing the services of the people that did the amazing Nucleus demo.

Broderbungle...

Due to an incompatibility with the new (1 Megabyte) IIGS, Broderbund has removed the copy protection from Print Shop GS. Before you jump for joy, you should also know that Broderbund plans to put the copy protection back just as soon as they can figure out what the problem is. It sure is nice to know exactly how a company perceives you isn't it? When asked about the increasing number of Apple II owners that are using hard drives, the source at Broderbund said that there just were not enough of them out there to justify removing all copy protection. Take a deep breath, count to ten, and then take a few moments to let the wonderful people at Broderbund know exactly how you feel about them and their Apple II policies:

Broderbund Software, Inc.
17 Paul Drive
San Rafael, CA 94903-2101
(800) 527-6263 or (415) 492-3500

Where in the *!@# is Carmen Sandiego?

In between deep breaths, ask them when the IIGS specific versions of "Where in the USA is Carmen Sandiego?" and "Where in Europe is Carmen Sandiego?" will be available. And tell them to get off the stick with a IIGS version of "Where in Time is Carmen Sandiego?"

Where No Hard Drive Has Gone Before...

Applied Engineering, maker of the Vulcan hard drive, has just announced two new additions to it's family of internal hard drives. The new models, named the Klingon and

"Get A Real Contest..."

O.K. So the response to the last contest was not all that great. Actually, there were no entries, so there is no winner. But, seeing as how we love pain (we do this magazine with AppleWorks GS, remember?) we will give the old contest concept one more try. This time the contest is really simple. All you have to do is design the very best Arkanoid II level or levels (you don't have to do 65 new levels!) that you can and send them here to us at GS+. We will publish the winners and the best of the rest in a future issue of GS+. The winner and a runner-up will get one prize each from the following fabulous choices:

<i>The IIGS ToolBox Reference: Volume I</i>	by Apple Computer, Inc.
<i>The IIGS ToolBox Reference: Volume II</i>	by Apple Computer, Inc.
<i>The IIGS ToolBox Reference: Volume III</i>	by Apple Computer, Inc. (this is a Beta Draft book)
<i>Exploring GS/OS and ProDOS 8</i>	by Gary B. Little.
Crystal Quest	by Cassidy & Greene
Battle Chess	by Interplay

The Rules:

- 1) Send your entry(s) on a diskette (3.5" preferred, but not necessary) to the following address:
GS+ Contest #2: Revenge of the Arki-nerds
c/o Ego Systems
P.O. Box 15366
Chattanooga, TN 37415
- 2) Or, pack your entry with ShrinkIt and send it to 'Obnoxio' via America Online.
- 3) Entries must be received no later than December 15, 1989.
- 4) Be sure to indicate your prize choice and a phone number we can reach you at (an address will be fine if you are paranoid about stuff like that).
- 5) Only 2 prizes will be awarded, but Honorable Mentions will get their names and entries published along with the winner and runner-up.
- 6) Levels depicting rudely shaped objects will be not be considered for the prize. But, as before, we can always use a good laugh, so go ahead and send them in.
- 7) We welcome your ideas for new contests. If you have one, send it to the above address.

Rumors, Wishes & Blatant Lies

(continued)

Romulan, offer an incredible number of features and absolutely **unbelievable** amounts of storage (5 and 10 Gigabytes respectively). The top of the line Romulan drive automatically senses such things as earthquakes, dust, cat hairs, leveraged buyouts and other data threatening situations. When the drive notices these things, it automatically makes a backup and then parks the heads over a special, data free area which Applied Engineering calls the Romulan's "Neutral Zone." The controller cards for both the Klingon and the Romulan have a special "Cloaking Device" that will detect the presence of a virus and then make your application

programs invisible to it. **Unreal!** The price? According to an AE spokesman, "If you have to ask, you can't afford it."

It's About Time!

Apple is finally shipping System Software v5.02. This newest release of the System Software **should** correct most of the problems found in v5.0. Look for it at your authorized Apple dealer; on your favorite information service; or on our own Great Scott!! BBS, phone number (615) 875-4607.

The first thing you need to do with your GS+ disk is to **MAKE A BACKUP COPY OF IT!** The next thing you should do is to put the original in a safe place. Now that all of that's behind us, let's look at what's on this issue's disk.

The disk itself is named :GSP.V1.N2: and it contains six folders. Those folders are:

BrushWGreatness

This folder contains all of the pictures discussed in "Brush With Greatness" (page 7). The seven pictures of Mr. Trump are in a folder named, "Trump," and the four pictures of Mr. Harrison are in a folder named, "Harrison". Since these pictures are uncompressed, any IIGS specific graphics program (PaintWorks Plus, DeluxePaint II, SHRConvert, etc.) should be able to load them in for viewing.

EGOed

The EGOed folder contains three files. "EGOED" is the EGOed New Desk Accessory, "EGOed.p" is the TML Pascal II source code for EGOed, and "EGOed.r" is the TML Pascal II resource file for EGOed. For detailed instructions on installing and using EGOed, refer to the EGOed article beginning on page 10.

Icons

This folder contains the files "Bounce.It.Icon", "LaserF.Icon", "M.BlasterP.Icon" & "Tower.Han.Icon." Copy these files into the Icons folder of the disks that you run each of these programs from. The next time you are in the Finder, you should see the new icons for these programs. (See "Icons" on page 17.)

LaserForceLev

This folder contains two new levels for the game Laser Force (reviewed on page 30). To play these levels, copy them into the SCREENS folder of your backup copy of Laser Force. These levels are named "Level.077" and "Level.078." If you have already created your own levels 77 and 78 you will need to rename these files so that they come after the last level that you have. Remember that valid file names for Laser Force levels are from "Level.001" to "Level.999." Once you have the files copied into the SCREENS folder, start up Laser Force and select "Game" from the main menu. When you arrive at the game configuration menu, use the mouse or arrow keys to select the level that you want to play, then click on "Start Game." You can also load these levels into the Laser Force game editor and change them if you wish.

System5.Compat

There is one file in this folder: "V1.N1.Compat." This file contains the text from last issue's, "System 5.0 Compatibility Chart." Use EGOed or any other program that can read text files to read or print this file.

Writers.Guide

There is one file in this folder: "Writers.Guide." This is a plain text file that tells you what you need to do to write reviews, articles, programs, etc. for GS+. Use EGOed or any other program that can read text files to read or print this file.

That's all for Volume 1, Number 2. Remember that we need **your** help to fill up the GS+ disk! Be sure to read the Writers Guide and get involved with GS+!

Once again, *GS+* is pleased to bring you several neat new Finder icons for programs that don't come with unique icons of their own. This issue, we received a helping hand from Craig Anderson of Corvallis, OR. Craig submitted icons for the commercial program "Math Blaster Plus" by Davidson & Associates, the ShareWare program "Bounce-It" by John R. Tiereny, and the Public Domain, "Towers of Hanoi" program by Bill Fortenberry. All of these icons are in the **Icons** folder of your *GS+* disk. Craig drew all of these icons using DICEd version 1.2. Thanks for the icons Craig!

Also in the **Icons** folder is a new icon for the game, "Laser Force" from Britannica/FanFare Software. This

icon was drawn by our own, exhausted, Steven W. Disbrow, using DICEd version 1.1. What is DICEd? DICEd is a ShareWare (\$15) icon editor by DAL System. You can contact DAL Systems at POB 287, N. Liberty, IA., 52317. DICEd is also available from just about any of the better on-line services.

Remember, if you have a neat icon that you did with your own two hands (or feet), share it with us here at *GS+*. Be sure to tell us about the program and any tricks you used to create it. If we use your icon, we'll put your name here and give you our deepest most sincere thanks for an icon well done.

DISKLESS?

If you received a complimentary copy of *GS+*, you probably did not get a disk with it. If you would like to receive a disk, send a check or money order for \$8.00 to:

GS+ V1N2 Disk Offer
c/o EGO Systems
P.O. Box 15366
Chattanooga, TN 37415

Tennessee residents add 5.5% sales tax.
Chattanooga residents add 7.25% sales tax.

TML Pascal II v1.1 - retail \$150

Not Copy Protected
Requires 1 Megabyte of RAM
Authors not listed

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Jacksonville, FL 32217
(904) 636-8592

Reviewed by Steven W. Disbrow

TML Pascal II is a native code Pascal compiler for the Apple IIGS that can be used to create stand alone applications or Desk Accessories. TML Pascal II is an update to the original (and very popular) TML Pascal. Like its predecessor, TML Pascal II operates in a desktop environment that conforms very strictly to Apple's guidelines. At this point in time, a text only (Apple Programmers Workshop) version is not available. TML Pascal II is the first IIGS compiler to take advantage of, and give access to, the new features available in System Software 5.0. Since a great many of you will be upgrading from the original TML Pascal, this review will also address some of the differences you will encounter as you attempt to translate your programs from the old compiler to the new one.

Documentation

The documentation for TML Pascal II is 375 pages long and split into four parts: User's Guide, Programming, Language Reference, and Appendices. One hundred and fifty-one of those pages are devoted to listings of the source code that is used to access the IIGS Toolbox. For the most part, the TML Pascal II documentation is very good. The Language Reference, which includes discussions of all IIGS-specific extensions, and Programming sections are excellent.

Two places where the manual is very weak are the Resource Editor documentation and the Index. The Resource Editor, which is the newest and most exciting part of TML Pascal II, is very poorly documented. In fact, some of the options available in it have been left out of the documentation entirely. Fortunately, the Resource Editor is fairly easy to use, so this is not much of a problem. The Index is another story. As I said before,

151 pages of the TML Pascal II manual are devoted to listings of the source code that is used to access the IIGS Toolbox. The Index in the back of the manual deals only with those 151 pages. There is no general index to the rest of the manual! The table of contents is very good, but it does not provide the kind of cross-reference information that one gets from a good general index. This is a very serious omission in an otherwise satisfactory piece of documentation.

The TML Pascal II Text Editor

The editor used in TML Pascal II is based on Apple's new Text Edit tool set and has several new features that address many of the shortcomings in the original TML Pascal editor. Source files, for instance, are no longer limited to 32K in size. Theoretically, they can be as big as available memory allows. You can also have as many files open at once as available memory will allow. While nowhere near as fast as the editor used in the ORCA/Desktop, using the Text Edit tool set has made the TML Pascal II editor much faster and much more usable than its predecessor.

A unique feature of the TML Pascal II editor is that it lets you write your programs in any font that you have available. This is a truly interesting feature that most programmers will actively ignore after about five or ten minutes of experimentation.

This editor has quite a few problems. The most serious of these problems is the tendency of the editor to almost completely trash a source code file. This seems to happen when a file gets to about 32K, or larger, in size. All you have to do is open the file and type. Sometimes the trash appears where you are typing and sometimes it is hidden at the bottom of the file. Due to this problem, I had to write quite a bit of the EGOed program (see EGOed on page 10) using the ORCA/Desktop editor. Since this editor is based on the Text Edit tool set, it is possible that this problem is Apple's fault. However, I have used EGOed, which is also based on the Text Edit tool set, to edit files larger than 32K, and I have had no problems at all. If this is Apple's fault, it should be corrected in the next release of the System Software.

The search and replace facility is the most bare bones that I have ever seen. If you search for (or try to replace) a string and it is not found, all you get is a beep. No

message, no chance to try again, just a beep. This might not bother some people, but on the IIGS it is important to differentiate between a 'String Not Found' beep and the dreaded 'The Computer Just Died For No Good Reason' beep.

Most of the other problems with the TML Pascal II editor are actually things that got left out during the transition from the original TML Pascal. For instance, if you were a fan of the original's 'Tile' and 'Stack' windows commands, you are going to be very disappointed to learn that they have been removed from TML Pascal II.

Resource Editor

TML Pascal II also comes with a Resource Editor that lets you design most of the user interface (windows, menus, dialogs, etc.) of your program without having to write any Pascal code. Being able to do this sort of thing can significantly cut down the amount of time that is required to design and code a IIGS program.

Now, if you are the observant type, you will have noticed that this is a review of TML Pascal II v1.1. Less than two weeks after the release of v1.0, TML found so many bugs that they quickly fixed what they could and sent out v1.1. Most of those bugs were, and still are, in the Resource Editor. The major problem that is in both versions of the Resource Editor is that it loves to put trash in the menus, dialogs and alert boxes that you have defined (the v1.0 Resource Editor also had a tendency to lock up the computer). With all of the time that TML spent bringing out this product, you might wonder how so many bugs made it to the final version. I think I might have the answer to that After about two days of banging my head against the Resource Editor in v1.0, I called TML's technical support number to report my problems. After a few minutes of conversation, I noted to the person at TML that it was odd that the resource files that came with the example programs worked fine, but the ones I created with the Resource Editor were always filled with trash. So I asked, "Were those example resource files created with this version of the Resource Editor?" His reply was, "No. Those were created on the Macintosh and then ported over to the IIGS." Ah. From this comment and several others, it was fairly easy to tell that TML had tested the Resource Editor very little, if at all. I may be old fashioned, but I feel that if software is going to be developed for a particular computer, it should be developed on that particular computer.

Most of the problems with the Resource Editor were cleared up in v1.1, but they should never have happened. There are still a few problems in the v1.1 Resource Editor, but you can avoid them if you are careful. First and foremost, plan your windows, menus and other elements of your resource file before you begin to enter them into the Resource Editor. Once you have your resources entered, the Resource Editor is **very** likely to trash your resource file if you make any changes, no matter how small. Menus seem to be especially sensitive. Once you get them in, leave them alone, or you will find yourself starting all over again. And, for goodness sake, keep backup copies of your resource files to avoid losing your work. If you are very careful, you should find the Resource Editor to be a very valuable tool in your IIGS programming.

Compiler & Linker

Fortunately, the TML Pascal II compiler is still the fastest and most robust Pascal compiler available for the IIGS. When I say "fast" I mean that no other high level language compiler for the IIGS can touch it. When I say "robust" I mean that, unlike most other IIGS compilers, the TML Pascal II compiler does not lock up the computer when you make a simple mistake. Beginners will be delighted with the amount of forgiveness that is built into TML Pascal II. For example, when working on EGOed, I had no idea that for a New Desk Accessory to use a resource file, you either had to open the resource file explicitly in your program or have it open in a Resource Editor window. So, I compiled my program to memory, selected it from the Apple menu, and nothing happened. Amazingly, the cursor still moved and the menus still worked. So, I opened the resource file to see if it had been trashed. It had not. I tried selecting EGOed from the Apple menu once again and, this time, it worked. Instead of locking up the computer, TML handled the error as best it could and kept on going. Very nice.

There have been quite a few syntactical changes from the original TML Pascal that were made to make TML Pascal II comply more strictly with Apple's standard naming conventions. These changes will cost you quite a bit of time as you convert your original TML Pascal programs, but it's worth the trouble to keep your code up to date and in line with Apple's standards.

The TML Pascal II linker now creates Object Module Format (OMF) version 2 load files. I have not been able

to test it yet, but this means that you should be able to link your TML Pascal II programs with other languages that produce OMF version 2 files. This is a handy feature that every IIGS language product should offer.

One of the main problems with the original TML Pascal linker was that it created huge executable files. After three years and many complaints about this, the linker in TML Pascal II also creates huge executable files. I certainly wish that TML would take the time to fix this. It is embarrassing to write a "Hello World" program that takes up more than 10K.

Support

One of the most important parts of any development product is the customer support that you get with it. Over the last few years, TML Systems, Inc. slowly disappeared from the IIGS scene as they devoted more and more resources to their Macintosh products. However, earlier this year, TML Systems, Inc. decided that they were going to recommit themselves to the IIGS and all of the IIGS customers that they had. So, they sent out a letter to all of the owners of the original TML Pascal that not only announced TML Pascal II, it also told of expanded IIGS support that would be made available. It sounded great. Now that TML Pascal II is available and TML Systems, Inc. is recommitted to the IIGS, what sort of support are they offering? To quote directly from the TML Pascal II manual, "Direct Technical Support for TML Systems'

Apple IIGS products is available specifically between the hours of 2:00 P.M. and 5:00 P.M. Eastern Time, Monday through Friday, at 904-636-0118."

So there you have it. No toll-free number, three whole hours a day and you only had to pay \$150 for the privilege. The only thing I can think of to say at this point is, "TML Systems, Inc. level of support for its IIGS products is far below acceptable."

So What Do I Recommend?

TML Pascal II is the best Pascal language compiler currently available for the IIGS. However, it is seriously hampered by a kamikaze Resource Editor, a non-optimizing Linker and almost laughable customer support. If you have the original TML Pascal and can get TML Pascal II for the upgrade price of \$49, you should go ahead and get it. If you are devoted to another programming environment and want TML Pascal II for its Resource Editor, I would advise you to save your money and wait for one of the stand alone Resource Editors that are due to be released in the coming months. If you are a beginner, you should take a look at TML Pascal II simply because it is so forgiving and easy to use. Due to the shoddy customer support policies, I would have to say that under no circumstances should anyone pay the retail price of \$150 for this package. Especially when you can buy it from a discount software house or reputable mail-order firm for less than \$100.

TML Source Code Library II - retail \$49

Not Copy Protected
Requires TML Pascal II
All programs by Vince M. Cooper

TML Systems, Inc.
8837-B Goodbys Executive Drive
Jacksonville, FL 32217
(904) 636-8592

Reviewed by Steven W. Disbrow

TML Source Code Library II (SCL II) is a collection of demonstration programs that show how to program the IIGS using TML Pascal II and System Software 5.0. All

executable, source code, and resource files are included with each of the programs in SCL II so that you can examine, alter and recompile them to see how they work.

Real World Examples . . .

The best thing about SCL II is that it is heavily geared towards helping programmers get maximum advantage out of all of the new features of System Software 5.0. Almost every new System Software 5.0 toy is explored in the 14 examples included on the SCL II disk. If you want practical, working examples of how to use pop-up menus, the text edit tool, the print manager, GS/OS, and even how to access the modem; you should give SCL II a serious look. But only after you consider the rest of this review.

No Comment . . .

There is a joke in the computer programming field that goes something like, "If you want real job security, don't put any comments in your source code." Seeing as how there are almost NO comments in ANY of the SCL II programs, I would say that Vince M. Cooper is feeling very secure at TML Systems. Ordinarily, the almost total lack of comments in the programs (and the total lack of written documentation in the SCL II package) would make this package unfit for anyone but experienced programmers. But, since these examples focus so heavily on System Software 5.0, and since the new tools in System Software 5.0 are so different from anything in the previous incarnations of the IIGS System Software, I can honestly say that these examples are almost useless without the purchase of the Apple IIGS Toolbox Reference Volume 3. Without comments or that book,

there is no way that **anyone**, not even the most experienced IIGS programmer, could get more than a vague idea of what was going on in most of these programs! This is a real pity. If TML had taken that extra 2 to 3 hours a program to put in even a meager set of comments in each, we might have seen a real explosion of **GREAT** IIGS software. As it is, if you do not have access to the Apple IIGS Toolbox Reference Volume 3, you will just have to scratch your head and wait for someone else to write the next AppleWorks.

Too Bad . . .

If you have the Apple IIGS Toolbox Reference Volume 3, SCL II is a solid set of practical examples that can help minimize the time you need to learn programming most of the new features in System Software 5.0. If you do not have that book, you are just wasting your time and \$50.

Cutting Edge EADB-105 Keyboard

Retail price unavailable
\$149 from Programs Plus (bundled with Macromate)

Cutting Edge, Inc.
Address unavailable

Reviewed By Steven W. Disbrow

Just Your Type?

The keyboard that comes with the IIGS is a good keyboard. But, if (like myself and a couple million other folks) you use an IBM PC or compatible at work, you probably wish your IIGS keyboard was a bit more like the one you spend 8 hours a day with. Thanks to Cutting Edge, Inc. (and several other manufacturers), that wish is easily granted. The Cutting Edge EADB-105 keyboard is an IBM PC/AT style keyboard that plugs into your IIGS's Apple Desktop Bus port. It includes 15 function keys, a numeric keypad and a full set of cursor control keys (4 arrow keys, page up, page down, and so on).

Extended keyboards have several advantages over the standard IIGS keyboard. The most obvious of these advantages is that they are laid out just like the familiar IBM PC/AT or Macintosh II keyboard that you probably

use at work. All of the keys are right where they are on your PC at work so there is no need to readjust yourself to your IIGS's non-standard keyboard.

The Cutting Edge EADB-105 keyboard has several advantages over even a PC/AT keyboard that make it an excellent replacement keyboard for the IIGS. The first of these advantages is the fact that the Cutting Edge keyboard has two sets of Control, Option and Command (Open-Apple) keys arranged on either side of the space bar. This makes it much easier to activate keyboard shortcuts, such as Open-Apple-P, since you can use just your right hand instead of having to use both hands or having to overextend your left hand to press both keys at once. The Cutting Edge keyboard also has an excellent feel to it. Only two of the keys, return and caps lock, have a "mushy" feel to them. Every other key has excellent tactile and audible feedback when you press it. Another advantage the Cutting Edge keyboard has over the IIGS keyboard is that it is easy to clean. I have three cats, so cleaning the keyboard is something that I must do regularly. The key caps on the Cutting Edge keyboard lift off easily with a paper clip so that I can get right to the business of cleaning. It takes about 45 minutes to an hour just to get all of the key caps off of my IIGS keyboard! This makes cleaning my IIGS keyboard an all-night event. I can clean the Cutting Edge keyboard in about an hour. This may not matter to most folks, but one of the

best ways to keep your computer equipment healthy is to keep it clean, and the easier it is to clean something, the more likely you are to do it.

Ah, but there are a few problems with this keyboard. The three biggest problems it has, it shares with just about all extended keyboards. First of all, it is expensive. As I said earlier, the IIGS keyboard is a perfectly good keyboard and buying a keyboard this expensive just to have a more familiar work environment is not something that is easily justified with most spouses. Second, extended keyboards are big. They take up about 25 or 35% more desk space than a IIGS keyboard and can make it very difficult to find room for you to move your mouse around. Third, you must use a special macro program (such as Roger Wagner Publishing, Inc's. Macromate program) to make use of the function keys. While it is relatively easy to write IIGS software to take advantage of the extra keys, not many people have them, so not many software developers bother to put the capability into their programs. This may change as these keyboards come down in price, but it will be quite a while in coming.

While those problems affect almost all extended keyboards, I could find only two problems that were specific to my Cutting Edge keyboard. The most serious of these problems is that the ADB connectors on each end of the keyboard are very loose. This has not caused any problems thus far, but it certainly is not the quality of workmanship that you expect in a product that costs this much money. The second problem is that the 'num lock', 'caps lock' and 'scroll lock' indicator lights do not work with the IIGS. This is not really that big a deal, but it would be nice to see the little light come on when I push down the caps lock key.

Like religion and politics, keyboards are something that you should not argue about. Everyone has a favorite type of keyboard and most folks hate even the thought of switching. If you like your IIGS keyboard, don't bother with this or any other extended keyboard. However, if you miss your IBM keyboard or you really hate the IIGS keyboard, the Cutting Edge EADB-105 keyboard is an excellent replacement keyboard that you should take a serious look at.

Game Reviews

Battle Chess - retail \$49

No On-disk Copy Protection
Requires 512K of RAM
IIGS version by Jim Sproul

Interplay
1575 Corporate Dr.
Costa Mesa, CA 92626

Reviewed by Wayne Packard

Working through different companies, the folks at Interplay have been responsible for games such as Tass Times in Tone Town, Wasteland, and the extremely popular Bard's Tale series. They are also the creators of Neuromancer (see review on page 28) which was the first GS game released under the Interplay name. For the past few months, they have been working on what is perhaps their most eagerly awaited IIGS game yet. You will not be disappointed to hear that they have outdone themselves. Battle Chess is terrific!

Battle Chess provides a fresh angle on an age-old game of strategy. The rules to chess are fairly simple, and the movement patterns of the individual pieces can be mastered quickly. However, chess is a game which can provide a lifetime of challenging entertainment. I enjoy playing chess, and have been playing for many years, but even if you have never played chess, or have played and didn't care for it, you may still be interested in purchasing Battle Chess.

In Battle Chess, the name says it all. When two pieces occupy the same square, Battle Chess acts out, in full animation, the battle for that square. Every piece on the board seems to have a personality of its own, and it interacts with every other piece on the board in a unique manner.

The program's interface is completely graphics-based, loosely following Apple's user interface guidelines. There are pull-down menus for setting the various options, and the menu bar remains hidden until you click at the top of the screen, so that you can have a full view of

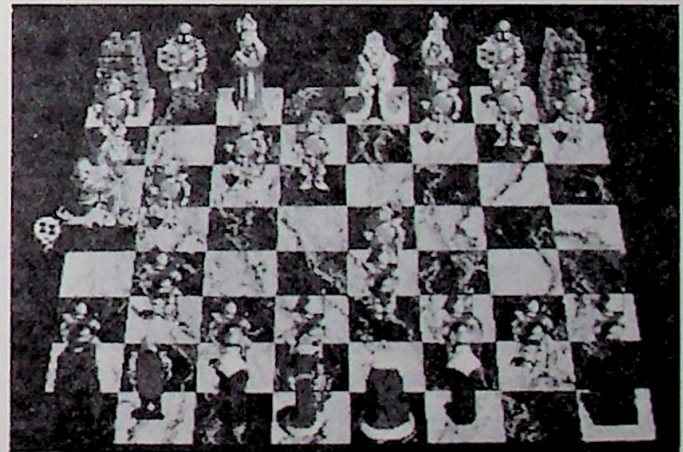
the game board. (Incidentally, the menus are suspended in midair by little angels.)

Battle Chess provides lots of options to vary the play of the game. Under the disk menu, you can save a game to finish at a later date, load a saved game, setup the board anyway you like, start a new game, or exit the program. There is also a play menu where you can force the computer to move (if it's taking too long), take back a move you shouldn't have made, replay the previous moves, or have the computer suggest what might be the best move for you. These options are nice for the beginning chess player. The next menu allows you to turn the sound on and off (although you can't set the volume). It also switches from a three-dimensional to a two-dimensional board and back. One nice feature of Battle Chess that you don't find in other programs is the ability to play against an opponent using a modem. (The person on the other end of the phone must have his own copy of Battle Chess, however.) This option is selectable from this menu, as is the mode in which two people can play each other using the board on screen, and the one in which the computer plays itself. The last menu is used to set the desired difficulty level. Computer chess games basically determine what the best move in a situation would be by playing out every possible combination of moves. Therefore the less time the computer has to "think," the worse of a chess player it will be. The lower levels of Battle Chess simply force the computer to move after a certain amount of time, regardless of whether or not it has gone through all the calculations. Likewise, the higher the level, the more time the computer is allowed to contemplate its move, and the better it will be. Obviously then, games at the higher levels will take much longer to play than those at lower levels, but they will be much more challenging.

Once you choose the difficulty level and who will play each side, you are ready to begin. With the default setup, the computer plays blue, the human plays red, and the human goes first. To move a piece you simply click on it with the mouse, move the pointer to its new location, and click again. After the animation sequence loads from the disk, the piece comes alive and marches to the location you have chosen. If the new space is unoccupied, the piece stands still and the game continues. If however, the square is occupied by an opponent's piece then the pieces square off for hand-to-hand combat! The combats must be seen to be believed, some of them are hilarious! After the battle, the losing piece dissolves and the winning piece

takes its position on the square. In case you are wondering, the piece who would have won by normal chess rules always wins, but it's still neat to watch the fight. The animation is really one of the most intriguing parts of this chess game. I have played chess programs which were much better at the game than Battle Chess and they had many more features which greatly enhanced the play. But there is something about having the pieces move on-screen and actually fight for control of a square that makes this my favorite chess program.

The programmers have done an excellent job with the graphics in Battle Chess. The images are sharp, and the animation is smooth - even in the GS's native 2.6 MHz mode. The three-dimensional board makes the position of the pieces somewhat hard to determine at times, but after you play it for a while you will get used to it. There is also a two-dimensional board display, but the pieces are not lifelike, and they don't fight. It's just like any other chess game. If you are interested in chess for the game itself, you should probably consider another chess program such as ChessMaster 2100, an excellent chess program.



Battle Chess also has some realistic sound effects which add greatly to the game. The queen, for example, screams when she is captured, and the rooks have an evil laugh when they are about to smash a pawn! I might add that the game is somewhat violent at times, and you may wish to try it yourself before allowing your children to play it. If the graphics are the main attraction of Battle Chess, the sound plays an excellent supporting role.

The manual that is included with Battle Chess is well-written and clear. However, it says very little about the program itself and is basically a tutorial for beginners on

how to play chess. It is an excellent introduction for someone who is new to the game, and since the program options are so easy to use, very little instruction is needed. Also in the manual are complete listings of twenty classic chess games. These are included for study, but they are also part of the off-disk copy protection scheme.

The game comes on only one 800K disk, and that in itself is amazing when you consider the amount of graphics and sound this game has. It also boots quickly because it loads under ProDOS 8, rather than ProDOS 16 or the new GS/OS.

I did find a few problems with Battle Chess, which will need to be corrected, but I did not find anything that would make it unplayable, and I would not let any of these bugs stop me from buying the game.

First, I was unable to persuade the game to launch from the Finder under GS/OS 5.0 on my system. It tries to load, but clears the screen somewhere in the middle and then hangs up the machine. This may possibly be some type of bug in the latest version of ProDOS 8. It would be nice to launch this game from a hard drive, but for now I guess we will have to be content with booting it from a floppy.

Another problem I found concerns the Control Panel CDA. (This is one place they strayed from Apple's guidelines, because there is no Apple Menu for NDAs). As I said before, the sound is excellent, but be sure to set the volume level before you boot the game. If you forget to set the volume and try to do so from within the program, watch out! The Control Panel appears normally, but as soon as you choose one of the options the program crashes into the Monitor with a spectacular display of memory locations in hexadecimal. The only option is to restart, and the game you were playing is lost forever. If you are losing badly, you might want to check this bug out for yourself!

One minor annoyance which is really a hardware limitation (depending on your setup) is amount of time you must wait between moves. Each time you make a move, the computer must access the disk to load the necessary information for the graphics to move. Using a floppy drive, this wait becomes a little bit bothersome. I am sure that if Battle Chess were run from a hard drive this time would be greatly reduced. One solution to this problem

that I came up with (because I don't have a hard drive yet) seems to work quite well. The program only requires 512K to operate, and the files on the disk take up less than 600K. So if you have 1.25 megabytes or more of RAM in your machine, you can make a 576K RAM disk, copy the entire Battle Chess disk into RAM, and set the Control Panel to start up from the RAM disk. Now not only does Battle Chess boot much faster, the animation sequences load faster as well. With the RAM disk it takes an average of three to four seconds for the computer to begin moving rather than the eight to ten seconds with the floppy drive.

This little trick is just one of the benefits of a program that has no on-disk copy protection. I believe that a programmer has the right to be paid for his work, and he has the right to protect it. I do not think it is fair however to expect a customer to pay \$40-\$50 or more for a game and then have to risk that money every time he plays just because he can't make a backup copy. Key-disk protection is a little bit more tolerable, but it still requires keeping the original handy instead of stored away in a safe place. The method used by Battle Chess is off-disk copy protection. With this method, the program boots up and then asks for the answer to a question such as "In the Mannheim -- Nimzovitch match in Frankfurt 1930, what was black's 11th move?" This way, the programmer makes it essential that the person playing the game have access to the manual, and yet there is no problem making archival backups, installing on a hard drive, or doing neat little work-arounds like the one mentioned above. This method of copy protection is one of the best because it allows the owner of the software the freedom to use it, and yet provides some protection for the programmer. I commend Interplay for their use of this method, and I hope to see other companies use it in the future.

While I was in the process of reviewing this game, I showed it to several people to get their opinions. They all loved the game, but there was one suggestion that I heard again and again: when two pieces are about to fight, the square they are in should be blown up so you can see the action better. Hopefully, Interplay will include this in a future version of Battle Chess.

Overall, I think Battle Chess is a great program. If you like chess, or just want a program that can show off your IIGS, then this game is for you.

Dark Castle - retail \$44.95

Not Copy Protected

Requires 768K

Apple IIGS version by Lane Roath

Three-Sixty Pacific, Inc.
2105 S. Bascom Avenue
Campbell, CA 95008

Reviewed by Wayne Packard

Some of you may remember Dark Castle from when it was first released on the Macintosh by Silicon Beach Software. A while back, Silicon Beach announced their desire to turn their attention away from games and more toward productivity software. Apparently Three-Sixty Pacific, Inc. showed up at just the right time to buy the rights to Dark Castle, and they have now released it in several other formats. We can only hope that we will see more IIGS products from them in the future.

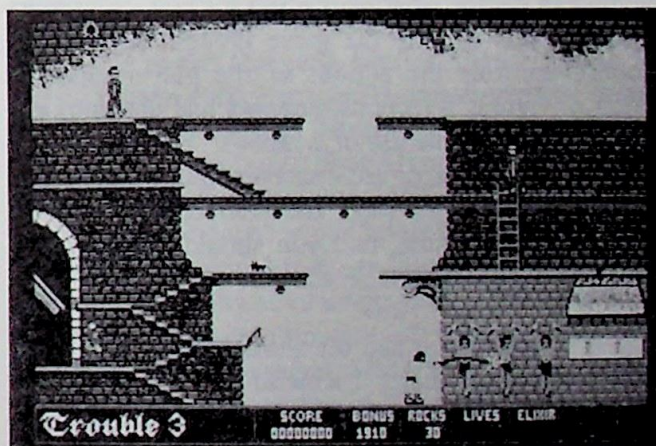
The basic idea behind Dark Castle is that you have entered the castle of the Dark Knight, and it is your quest to find and destroy him. As you might expect, he is not easy prey, and that is where the challenge begins. After the game boots, or is launched from the Finder, you are presented with an impressive picture and musical sound track. There is a short wait and then you are at the opening screen where you may select your skill level, and several other options. Clicking on the buttons lined up along the bottom of the screen will allow you to begin the game, quit, see a demo of the game, get information about the game, or change the game play parameters.

The first three options are self-explanatory. The button marked INFO gives an impressive graphic display which explains every area of game play. It shows which keys are currently selected for movement and which ways they move. It also indicates which key combinations are used for the more complex maneuvers and how the mouse control works. There is a screen of helpful hints and, finally, a synopsis of the various points awarded. To have the instructions right in the game is very helpful, especially since the only printed instruction provided is a single sheet which outlines the procedure for booting the game!

The last button (marked OPTIONS) allows you to alter the game play parameters. From here you can adjust the

volume and clear the high scores (which are always displayed on the initial screen). You can also completely customize the keyboard controls, and choose whether mouse movement will be horizontal or vertical. The user selectable keyboard control is a very nice feature, which is almost essential in this type of game. I found the default keys to be the most comfortable for me, however, this is purely a matter of personal taste.

It is also from this initial screen that you select your difficulty level. On the Beginner level, the game play is the same as in the Intermediate, except that you are not affected by rats, bats, arrows, etc. You can, however, be killed by falling. On the Intermediate level, all of these things (and more) come into play to make the game much more of a challenge, but still quite playable. On the Advanced level, though, all of these little friends of the Black Knight get much more skilled in their attempts to kill you, and they move a lot faster. Being able to finish the game on this level would be quite an accomplishment.



You begin the game in the Great Hall. The Great Hall acts as sort of a menu from which you choose the scenario you want to play. There are four different "rooms" you can visit, and these are selectable using the keys 1-4, or by simply clicking on the door of your choice with the mouse. Depending on the room you choose, you will have an entirely different object. In one room you must descend some stairs, avoiding bats, while picking up bags of rocks to use as ammunition. Once at the bottom you must dispatch the nice guard with the crossbow, and then quickly climb up on the rope before he comes back to life. If you succeed in exiting that screen, you must then swing on ropes over a large opening, remove two more guards and then climb down the ladders and exit to still another screen. On this screen,

you must kill a guard, pick up elixir and more rocks, climb down a ladder and kill another guard. Then you descend a small staircase and get an interesting medieval weapon off the wall. With this weapon you can knock out the big man with the whip, and run past him to get the key you need. Be careful though, one key is the one you want, and the other drops a large weight on your head. There is a way of telling them apart, but I'll let you figure that out for yourself. Once you get the key, you must run back past the man (before he gets up again), and then go back exactly the way you came in until you get to the Great Hall. Then you can embark on a journey through a different room. There is a lot to see in Dark Castle, and it will take a long time to master, but this game is truly a lot of fun. It is interesting to note that nowhere on the instruction sheet, or in the on-line help, does it tell you the object of each room, or even of the game. I guess finding out what you are expected to do is part of the fun.

As I said before, the control of this game is very flexible, and you can decide what works best for you. You must use both hands to play the game though, because the keyboard controls the actions of the player (such as moving in various directions, jumping and ducking) and the mouse controls the use of weapons. With it you aim and throw your rocks, or use whatever other weapons you may encounter along the way. The interface becomes quite natural in a short time, and you should not have any trouble becoming comfortable with it.

The graphics are great and the animation is smooth and quick - no problem there. Likewise the boot time is not too bad, and the game can be launched from the Finder. It is not copy protected in any way, so it can be installed on your hard disk, and you can make backups to play with and store the originals in a safe place. There isn't even any off-disk copy protection, so there is no hassle at all. I appreciate a company that makes a great game, and then makes it easy for the user to enjoy it. We should all support Three-Sixty in this, so please don't distribute or play pirated copies. After all, if they do not make any money from this game on the IIGS, why should they waste time making any others for us?

I did find a few problems with Dark Castle, one of which, for some anyway, might be a reason to postpone buying it.

The first of these problems was that sometimes, without warning, the computer would begin to make a low

humming sound, or a high pitched whine, and would then lock up completely. The only thing to do at this point was to restart the computer. This problem did not occur too often, and I was not able to relate it to anything or to reproduce it. Since it happens so seldom, this should not be considered a major problem.

The most serious problem I encountered, always occurs in exactly the same place. If you change the skill level to Intermediate, and then choose room two, you will be able to see this bug. Play through the first screen, and then climb up the ropes and go past the dragon into the next room. Kill the bats, and just stand there for a moment. After a little while, one of the stalactites which hangs from the ceiling of the cave will fall and land on one of the moving platforms. Then the screen will cover with garbage, and you will not be able to see what you are doing. The game still plays fine, but without being able to see, it is impossible to finish this particular room. Since it is essential to be able to get past this room to complete the game, the game is useless except on the Beginner's level. Although still fun to play, much of the challenge of Dark Castle is lost when your man is invincible. This one bug could possibly be reason enough to put off buying the game. I certainly hope that Three-Sixty corrects this problem soon, because this is a great game, and I would really love to finish it on the higher levels (although I can't even finish it on the Beginner level yet).

Overall, I think that Dark Castle is an excellent game idea that takes full advantage of the GS's graphics and sound capabilities. If you do decide to overlook the bugs and buy Dark Castle, be sure to send in your registration card and let Three-Sixty know that you expect a fix for these problems.

Next Issue . . .

Tips on using AppleWorks GS, and maybe a review of the new version 1.1

More IIGS drawing tips In Brush With Greatness

Reviews: HyperStudio v2.0
The new ComputerEyes software
Xenocide
Gnarly Golf (really, this time!)

AND MUCH, MUCH MORE!

Dungeon Master - retail \$39

Heavily Copy Protected
 Requires 1.25 Megabytes of RAM
 IIGS version by Don Jordon

FTL Games/Software Heaven, Inc.
 P.O. Box 112489
 San Diego, CA 92111

Reviewed by Bryan Walker

The field of computer fantasy role-playing games is certainly a crowded one. Since Colossal Cave first opened for business, programmers have been falling all over each other to provide consumers with the definitive game. With the release of *Dungeon Master*, FTL Games and Software Heaven have upped the stakes beyond anyone's expectations.

This game is like some others, utilizing the familiar 3-D perspective of earlier games. In *Dungeon Master*, however, you're treated with graphic realism that must be seen to be believed. Lichen, puddles of water, cracks in the walls, and an occasional drinking fountain are part of the dungeon's decor, all rendered with stunning detail. As a matter of fact, the detail is so crisp that you can actually face a wall and, by using your mouse, search the details of the area for secret buttons, or hidden doors! (Believe me, the programmers have incorporated these features into the game very well.) You'll also come across stairways, trap doors, gates, grates, and other objects that have to be operated through one means or another.

In addition to the spectacular graphics, stereo sound is also incorporated into the game. Digitized effects are used liberally, and the results add another tier of realism to a game that truly has an "atmosphere" all its own.

You start *Dungeon Master* by selecting four characters from the "Hall of Heroes." By looking at the picture that portrays the character, you can see the various attributes, skills, and possessions the character has. You can decide to "Resurrect" the character, taking him as is, or "Reincarnate" the hero, giving him a clean slate of skills and greater physical attributes. The second option also allows you to rename the character to suit your liking. On the down side, you can't roll your own heroes. However, the variety of characters presented for selection is very broad, including male, female, and even non-human types

of all ages and classes. (Well-read fantasy fans can easily pick out a few of their old friends in the selection!)

Dungeon Master has a very logical system of character skills and progression. While each character starts the game favoring the Ninja, Fighter, Priest, or Wizard classes, every hero can improve his skills in every class. Bone-headed barbarians can become powerful Wizards with enough practice! Even better, you don't have to kill monsters to improve your skills: using missiles of any sort can improve your Ninja level, using hand-held weapons improves your fighter score, and casting spells of various types can improve your Wizard and Priest levels. It makes sense! If you've got spare time in the game, swing weapons, throw rocks, or cast spells. Practice makes perfect! And it definitely pays off if you get your fighters up to snuff in the magic-using department quickly.

Speaking of magic, *Dungeon Master* uses a truly novel approach to the casting of spells. Instead of entering a simple spell number, or (even worse) having to type in the spell name, *Dungeon Master* allows you to build spells in segments! Each spell is constructed by choosing symbols from the four categories of Power, Elemental Influence, Form, and Class/Alignment. (Some spells won't use all four categories.) Each category has six symbols, providing various levels of power and effects. Fireballs, Lightning Bolts, Shield spells, Healing Potions, and many other magic-user goodies are possible with the right combination of symbols and enough practice. While this might seem a bit intimidating to those of us used to just typing in "Tiltawait," the system is intriguing and realistic. (To assist your experimentation, scrolls with spells and their symbol components are scattered throughout the dungeon.)

I normally loathe using a mouse to play a game, but the interface employed in *Dungeon Master* is an exception. It's very detailed, and allows for a high degree of flexibility. Most of all, it's amazingly easy to learn. All of the actions required in *Dungeon Master* can be made with a click or two.

The monsters, like the rest of the game, move in real time. Starting with mummies, and going all the way up to dragons, the creatures provide a constant supply of challenge, danger, treasure, and . . . food! Yep, your characters have to eat, and in addition to the occasional morsels you find in the dungeon, certain monsters make

good eatin' upon being slain. (For your convenience, they automatically fly into bite-sized chunks upon expiring.) Water is also supplied in various sections of the dungeon. Oddly enough, your characters use very little water, but consume food at a frantic pace. The more active, or heavily loaded your character is, the hungrier he becomes.

Every item in the dungeon has weight. Your character fatigues based upon his activity and the amount of weight he's carrying. Equipping your Wizard with a full suit of plate armor is possible, but his low strength might cause him to move so slowly and fatigue so quickly as to become a hindrance to the party. This can become a factor as the amount of "Really Cool" items you find increases.

Nearly all the doors are opened by keys. Sometimes, you have to kill a monster to gain keys, but they're usually found laying on the floor in one location or another. (Some keys are light grey, making them very difficult to see. Keep this in mind on the first level.) It is also possible to use force to open a couple of doors. In fact, trying to open doors with your axe can be a good way to improve your fighting skills.

There are several traps and puzzles in the game. The amount of brain-power required to solve them probably won't drive you to drink, but they do pose some challenge. It should be noted that more than one solution often exists for any given puzzle. Many trap doors are also very handy in disposing of, or protecting yourself from the non-magic-using monsters. (A closing gate at the right time on the right set of noggins can save the day . . .)

All of your adventuring leads up to a very tough confrontation with Lord Chaos, who is mentioned in the short story that comes with the instructions. He's tough, and he's surrounded by a gang of ill-tempered demons. If you've gathered the items you're told, (and if you've figured out how to use them properly) you stand a fair chance of surviving. Make sure and save your game often!

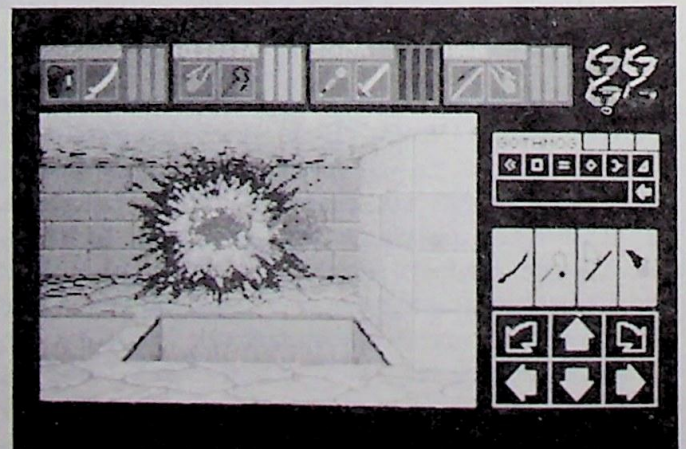
The subject of monsters and traps brings up one of the few features of the game that lacks realism: it's impossible to split the party up. The "surround and whomp" tactics many of us have used to send paper-and-pencil dragons to oblivion can't be employed here. Many traps that could easily be circumvented by simply splitting the party up prove to be quite a handful when you're forced to march around two by two. While it is possible for two groups of monsters to flank you, and for your characters to orient

themselves in different directions individually, they still must remain part of the group. I feel that this may have been a deliberate action on the part of the programmers to keep life from getting too easy for you. The game plays well, regardless. I should say that your party moves faster than almost all of the monsters, making it possible for you to reposition to the flank and rear of your opponent, provided you have the room.

Another snivel I have concerns the speed of the game itself. Movement can be a slow, very tedious affair. It's no secret that the IIGS isn't a Cray, and it tends to show in *Dungeon Master*. However, other games for the IIGS have been designed to overcome this limitation - *Bard's Tale* and *Thexder* are two examples that quickly come to mind. It would have been nice if FTL had put in the extra time and effort to do the same with *Dungeon Master*. Even so, the lack of speed does not detract from the overall value of the game.

The last, and most serious, problem with this game is that it is so heavily copy protected. While it is understandable that FTL would want to protect their investment in such a wonderful game, it is truly frustrating to have to use the original disk to play *Dungeon Master*. Off disk protection or even a key-disk scheme would be preferable to the "you have to boot from slot 5 with your original disk" method that *Dungeon Master* employs. I can only hope that FTL will remove the protection from this and any future games that they release.

All in all, *Dungeon Master* provides you with a realistic, believable, and absorbing diversion for many hours. I recommend this game highly. It is sure to become the standard for all computer fantasy role-playing games.



Neuromancer - retail \$49

No On-disk Copy Protection
Requires 512K of RAM
Program by Troy A. Miles

Interplay
1575 Corporate Drive
Costa Mesa, CA 92626

Reviewed by Bryan Walker

Imagine yourself immersed in a world of the future; a detailed amalgam of the movies "Tron," "Bladerunner," and "War Games." If this thought intrigues you, then Interplay's newest role playing game, Neuromancer, will certainly hold your interest for quite a while. Based on William Gibson's award-winning novel of the same name, Neuromancer places you in the role of a cyberspace cowboy (a sort of super-hacker) with a mysterious past.

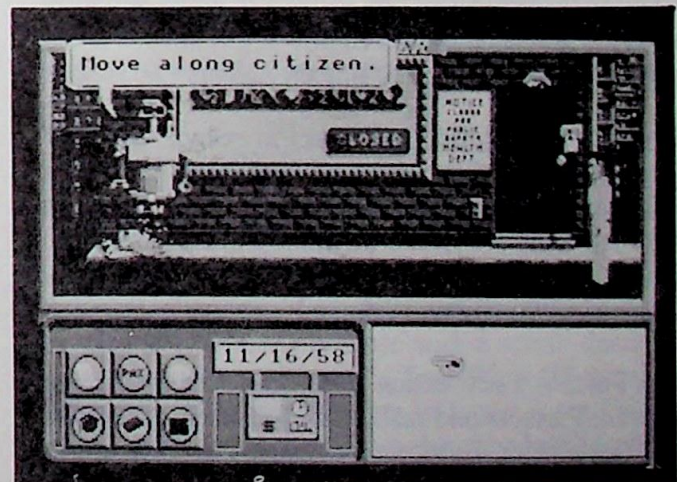
Starting the game facedown in a plate of food, with no memory of your past, you have to solve the puzzles and traps that await you. The PAX (Public Access System) machines will help you get on your way by displaying messages from other non-player characters (NPCs) of the game. Most of these folks are on your side, and can give you information and items that help a great deal. As you deal with these characters, and others that you meet as you explore the physical and electronic areas of Chiba city, you gain more knowledge, skills, and power. More than anything else in this game, knowledge is your most vital tool.

A large portion of this game will be spent in front of your "deck." (A future word for terminal.) From there, using passwords and link codes gained from your conversations, you can begin accessing different databases. Upon achieving this, the true game begins! Need money? Creative thinking can put you on a payroll! Want someone out of the way? The police have a list of their warrants on-line I found myself enjoying the ability to be truly devious, without worrying about the FBI carting my GS away. It seems the more information you uncover, the more there is to find out.

The mechanics of the game are similar to Maniac Mansion from Lucasfilm. You actually control a character as he walks around on screen from one location to another. When conversing with NPCs, you're offered a choice of

word balloons, each with a different response. You're also given a choice of using a word balloon that allows you to fill in the subject matter. This will be one of your most important tools. Ask everyone about everything! You'd be surprised at who knows what, and what they can offer you. Save your game often, though. Try to obtain information from the wrong person, and you can wind up in the pokey. This costs money, which is a real commodity in the beginning of the game.

After upgrading your skills, deck, and software sufficiently, you have the ability to enter cyberspace. This is a graphic representation of the electronic expanses of the database matrix. You'll find many databases that you can't reach with a link code here, as well as more powerful software and information. The catch is that you have to get past the ICE, or Intrusion Countermeasure Electronics. This is represented as a scintillating blue band around the geometric shape of the database. To get in, you've got to use the software that (hopefully) you've acquired, and blast away. There are dozens of different programs to combat ICE. Some will slow down the ICE attacks, halt them temporarily, chip away at them slowly, or just crush the ICE's defenses outright. If you're lucky, you can crack the ICE and get to the juicy software and information that's inside the database. If not, well . . . you did save the game, didn't you?



As tough as some of the ICE can be, the worst enemies are AIs. Artificial Intelligences. These beings pop up in certain databases after you've broken the ICE. The worst part about AIs is nearly all of them are invulnerable to your ICE-breaking software. You have to use your skill chips to beat AIs. (There are only six skills useful in fighting AIs, although you'll be collecting many more.)

Each time you defeat an AI, you'll gain power in four of the six "Anti-AI" skills. Remember, each AI has a weakness Perhaps by 'analyzing' your opponent, you can gain an advantage

Speaking of weaknesses, this game has a few minor ones. The disk access times as you move from one screen to another are a bit long. But not insufferably so, and certainly not enough to dim the enthusiasm the game generates. In addition, the NPCs that you converse with can be a bit dumb, waiting for exactly the proper word before giving up some much-needed info or hardware. Don't anger them with smart remarks, however. They do remember.

Another annoyance is the fact that you must refer to the games off-disk copy protection (a decoder wheel type device) every time that you log onto the PAX. If the PAX were not such an integral part of the game, this would only be a minor annoyance and the decoder wheel would actually add to the game's atmosphere. As it is, however, it can be downright aggravating.

Laser Force - retail \$29

Not Copy Protected
Requires 1.25 Megabytes of RAM
Program by Javier Rullan & Huibert Aalbers

FanFare/Britannica Software
345 Fourth Street
San Francisco, CA 94107
(415) 546-1866

Reviewed by Steven W. Disbrow

Laser Force is a new action game developed by European Software Partners and marketed by Britannica Software. Yes, that's right, Europeans actually buy IIGS's! The premise of the game is that you are a very, very small (almost invisible) Galactic Ranger trapped in a planet-sized maze that is filled with deadly robots. The game box promises a fun, fast, 3D game with lots of violence. Also included in the game is an editor that allows you to build your own 3D mazes to play in.

Laser Force is not copy protected! This is a wonderful surprise because the manual states quite clearly that it is

The strengths of the game far eclipse the minor quibbles listed above. The rich background the game generates, along with a multitude of directions you can go at any one time, make for a very open-ended adventure. While it would seem easy to become completely lost in this freedom, the authors have structured the action superbly, feeding you scraps of information at the best areas to make you really think about your situation. I often found myself lying in bed thinking about my next session's plan of action! At times, you may find yourself at wit's end, but a review of all your hints and a little ingenuity will win the day every time!

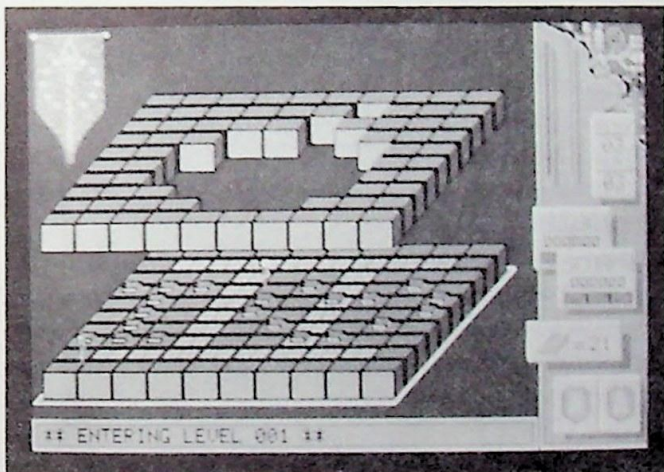
I'm a hard sell. I didn't really know what to expect with Neuromancer. If you're looking for arcade action, or orcs to decapitate, this game won't fit the bill. However, if you're after a program that will allow you to unlock your imagination, your deductive potential, and be a real silicon-armed rebel against a future authority, Neuromancer is a must! One of the best.

copy protected! Instructions are provided for installing Laser Force on your hard drive, if you have one. However, these instructions are a bit misleading. You are told to copy all files from the Laser Force disk into a folder on your hard drive. This implies that you should copy ProDOS and the SYSTEM folder along with all of the other files on the disk. To save space, you should copy all files **except** ProDOS and the SYSTEM folder onto your hard disk (you don't need to have more than one ProDOS or SYSTEM folder on your hard disk). With the exception of this one misleading section, the manual is excellent and almost completely unnecessary.

Once you have the game installed, you simply double-click on the LASER.SYS16 icon to start the game (a new LASER.SYS16 icon is on this issue's *GS+* disk, see *ICONS* on page 16). The game works well under GS/OS and loads quickly. When the main menu of the game appears, you can choose to either play the game or enter the game editor.

Selecting "Game" from the main menu takes you to a screen that allows you to set up your game controls. From this screen you can select to use either a joystick or the keyboard, turn the sound on or off, view the high scores,

and even select which level to start from! If you are using the keyboard and the default layout of the control keys does not suit you, you can re-configure them. Laser Force does not save your configuration, so you must reset the controls each time you start up the game. Also, it should be noted that if you intend to use a joystick with this game, you **must** connect it to your computer **before** you turn on the power. If you do not, the game will bomb. If two people are playing (that's right, Laser Force allows two players to play at once), one player **must** use the keyboard and one **must** use the joystick. This is not so much a limitation of Laser Force as it is the Apple II itself. Still, it would be nice if software authors could find some way to use both of the joystick ports available on the IIGS (there is a second one inside the computer). Once you have the controls configured to your liking, you can begin playing. It is very important that you get the controls configured correctly because, even after about 5 hours of practice, this game is very hard to control.



While not exactly the violent "slaughter fest" that the Laser Force box promises, Laser Force is fun. The game itself pits one or two players against a planet chock full of homicidal robots and each other. If you happen to shoot your partner in the back . . . well, that's just too bad for him. The only way to get away from the endless stream of robots is to collect the energy pellets that are scattered on each level. You can not escape from a level until all of the pellets have been collected (or you die). Some of the pellets are out in the open but others are hidden behind the walls and ladders that make up the "third person 3D" landscape of the Laser Force world. This, plus the fact that quite a few of the robots (there are 8 different kinds of robots) can fly, makes it most difficult to clear some of the levels. There are also teleportation booths on some levels

that zap you from place to place inside a level and can help you shake the robots on your tail. They can also dump you right into the lap of another robot. Once you clear a level, you are taken to the next, then the next, and the next.... There are 75 levels supplied on the Laser Force disk, so it's not so much a question of "Can I win?", it's more a question of "How far can I get?"

If you do manage to finish level 75, Laser Force comes with an excellent game editor that allows you to create your own levels to play in. The editor is completely mouse and menu driven and is a breeze to use. The editor is so self-explanatory and easy to use that the only thing that needs to be said about it is that it is self-explanatory and easy to use. You can build a level completely from scratch or you can load in and modify one of the levels supplied on the Laser Force disk. Each level is saved in a separate file so it is simple to share the levels you create with your friends (Be sure to check out the two new Laser Force levels on this issue's GS+ disk. See page 16 for more details).

I have only two minor gripes about Laser Force. The first is that the only way to quit the game is to either restart the computer or to enter the game editor and select the "Quit" option from the editors File menu. It would be very nice to be able to quit from any screen. The next gripe is that while the editor is mouse- and menu-based, the authors did not bother to put in the three lines of code required to support New Desk Accessories.

The programmers of Laser Force have done an excellent job. The game is fun, the animation is excellent, and the music is a soothing change of pace from the rock-and-roll type music that you hear in most new games. In fact, Laser Force moves so fast that the manual recommends that you play your first few games with your IIGS running at 1MHz. Only those with a severe death wish should play this game with a TransWarp GS running at full speed. The user interface in Laser Force (with the exceptions noted above) is just about the best I have seen in any arcade style game. No copy protection, the ability to configure controls, pick your starting level, and actually create new levels of play should be standard equipment in every game. If you are a game designer, you need to get a copy of this game just to see how it should be done. If you love arcade style shoot'em-ups and are looking for something with a twist, Laser Force is an inexpensive gem that belongs in your collection.

Compiled by Steven W. Disbrow

In the last issue of *GS+*, we gave a listing of all of the programs that we have been able to test with System Software v5.0 and information as to whether or not those programs actually work with System 5.0 or not. Since this is an ongoing concern, we've decided to make this a regular department. Since we don't have room to print the complete list, we will only put the newest programs we've tested here in the magazine. You will find the complete text of all previous installments of this department on your *GS+* disk in the folder, *System5.Compat*.

Items marked with a '.' have been tested by those of us here at *GS+* on a IIGS with 2.75 Megabytes of RAM, ROM version 01 and a 60 Megabyte CMS hard drive using the CMS SCSI controller card.

Items marked with a '†' were submitted by Craig Anderson and were tested on a IIGS with 3.25 Megabytes of RAM, two 3.5" drives, one 5.25" Applied Engineering drive, ROM version 01, and a 40 Megabyte Western Digital hard drive using Apple's Revision C SCSI card.

Items marked with a '\$' will work with System 5.0 only when launched from floppy disks.

Items marked with an '*' have an update in the works.

Programs That Work

AppleWorks 2.0 †•
California Games †
Copy II Plus †•
Disk Util II †
GBBS Pro •
Graphic Writer v2.0RG •
JigSaw •
Mavis Beacon Teaches Typing †
Once Upon a Time II... †
Reader Rabbit †
Skate or Die †§
Winter Games †

Balance of Power: 1990 Edition †
Cartooners †•
Designasaurus †
Draw Plus •
Gertrude's Secrets †§
Instant Music †•
MathBlaster Plus GS †
Once Upon a Time... †
Publish It! •
Silent Service †§
TML Pascal II •
World Games †

Programs That Do Not Work

Battle Chess •
Dungeon Master •
Neuromancer •

Update Information

According to Craig Anderson, Broderbund is working on an update to "Where In The World Is Carmen Sandiego" that will run under System 5.0. For more information on the availability of this update, contact Broderbund at (415) 492-3500.

If you have a program you've been able to test with System 5.0, let us know about it. Send your list of programs to:

GS+ System 5.0 Compatability
c/o EGO Systems
POB 15366
Chattanooga, TN. 37415

Be sure to tell us what kind of hardware you are using.

In the last issue of *GS+* we told you what a piece of junk HyperStudio v1.2 is. Well, since that time, we have received HyperStudio v2.0. After taking a few days out to play with it, we are happy to report that HyperStudio v2.0 is infinitely better than v1.2. It has only bombed on us twice in the three days that we have had it! Much better! In fact, we've been so pleased with HyperStudio v2.0 that we are considering using it to do a "stack" version of this magazine.

Please don't mistake the above statements for a retraction of the things that we said in last issue's Trash Can Award. We still feel that HyperStudio v1.2 is a tremendous piece of trash that should never have been released to the public. We also feel that the Apple II press acted irresponsibly in giving such universally good reviews (if you can call them that) to such a worthless piece of software, simply because Roger Wagner Publishing, Inc. has fairly deep pockets for advertising.

In the meantime, we thought that those of you that have HyperStudio v1.2 should know about this update. If you

have not gotten yours yet, you should have it in a few days. If you do not have your update by December first, you should contact Roger Wagner Publishing, Inc. to find out what the delay is. If you are considering buying HyperStudio, make absolutely certain that it is v2.0 you are getting. If the salesman won't let you open the box to check, take your business elsewhere. If you accidentally take home a copy of v1.2, you will have to send in your registration card and wait a couple of weeks to get v2.0. During that time, all you will have gotten for your money is a fairly nice speaker for your portable radio, and four disk-shaped paperweights.

During the next month and a half we will put HyperStudio v2.0 through every single test that we can think of. Look for a full review in the next issue of *GS+*. If HyperStudio v2.0 comes up short as well, we will let you know.

Steven W. Disbrow

The Classifieds

Beginning next issue, readers can place an ad in the *GS+* Classifieds for only \$5. This cost buys 25 words in one issue of *GS+*. Additional words are just 10 cents each. Centering and italics are free, boldface costs \$1 extra per line of boldface text. The *GS+* Classifieds are the perfect way to contact all of the other IIGS owners out there. The deadline for inclusion of a Classified ad in the next issue (Volume 1, Number 3) of *GS+* is December 15th, 1989. Simply fill out the coupon below (or a photocopy of it) and send it to us here at *GS+*.

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