

Sierra Newsletter

Volume 2, Number 1

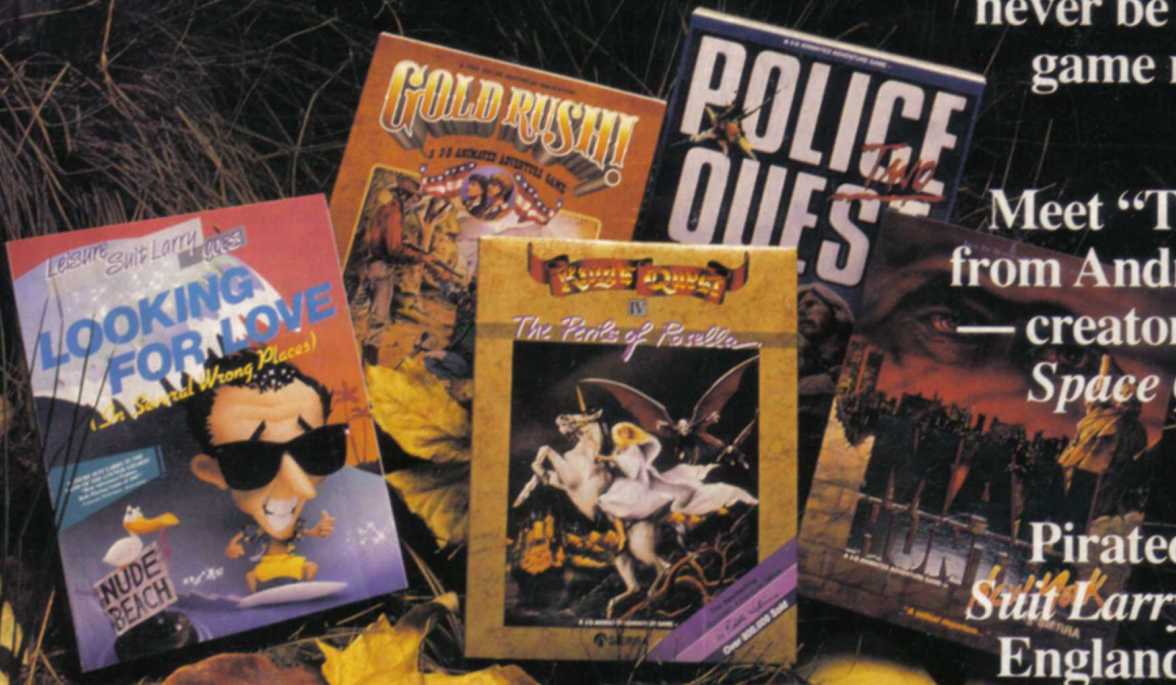
Spring 1989

New Sierra Hint
System open
24 hours a day,
365 days a year.

New! *Silpheed*
demonstrates why
Nintendo will
never be a serious
game machine!

Meet "Two Guys
from Andromeda"
— creators of new
Space Quest III

Pirated *Leisure
Suit Larry* poisons
England's "Wall
Street"



THE SIERRA NEWSLETTER

Publisher

Ken Williams

Executive Editor

John Williams

Editor

Nancy Grimsley

Design/Production

Greg Steffen

Sabine Duvall

Nancy Grimsley

Contributors

Kirk Green, Nancy Grimsley,
John Shaw, John Williams,
Ken Williams

Customer Support Contributors

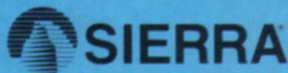
Robin Bradley, Liz Jacobs,
Robert Lindsley, Kerry Sergent

NOTICE TO USER'S GROUPS & NEWSLETTER EDITORS

The Sierra Newsletter is our attempt to inform interested computer owners about improvements in Sierra products and progress of the computer industry at large. If you think what we've written belongs in your publication, feel free to reprint the article. When reprinting an article, please credit the Sierra Newsletter and the author of the article.

Note: We must make an exception to this policy for the excerpts from "The Official Book of King's Quest" and "Law and Order" magazine. These works are the property of those credited and they must give their permission to reprint this text.

The Sierra Newsletter is published quarterly for the dealers and customers of Sierra On-Line, Inc. Copyright 1989 Sierra On-Line, Inc.



Sierra On-Line is a public company.

Sierra On-Line stock is listed on the NASDAQ Exchange as SIER.

Table Of Contents

Features

<i>Space Quest III</i> —The Men Who Designed The Game	3
From Supertramp to <i>Space Quest III</i> —An Interview with Bob Siebenberg ..	3
Police Quest Used In Real-life Police Officer Training	5
Twenty-four Hour Automated Hint Line Now Operational	6
<i>SILPHEED</i> —New Sequel To Thexder	9
Pirated Copies Of <i>Leisure Suit Larry</i> Contain Virus	13
<i>Police Quest II</i> Poster	17
Sierra On-Line Wins Awards	19
The Making of <i>King's Quest IV</i>	20

Departments

President's Corner	4
Products For Your Computer	
MS-DOS	14
HomeWord II — MS DOS	14
Apple IIE/IIC/IIC+	15
Smart Money — IIGS	15
Atari ST	15
Macintosh	22
Amiga	23
Customer Support Forum	
If You've Had Trouble Reaching Customer Service	10
Help! I'm Stuck in A Loop!!	10
Use A Modem To Get Your Hints and Help—Here's How!	11
MIDI Drivers Available for Downloading on Sierra BBS	11
Sierra BBS has <i>Space Quest III</i> Demo	11
Sierragram Winners	26
New Sierra Picture Contest	27
Sierra's Top Ten Best Sellers	9
Our Readers Respond	28
Cartoon/Drawing Contest	
Winners	6
Ongoing Contest	6

SPACE QUEST III THE MEN WHO DESIGNED THE GAME

by Nancy Grimsley

Mark Crowe and Scott Murphy are the designers of the Space Quest adventure games put out by Sierra On-Line. Not only did they conceive the idea and write the story, they are the major programmers on the game—to oversimplify their roles Mark does the pictures and Scott makes the characters move and respond. In a recent interview they talked about the process of creating an adventure game.

As the interview progressed I had an opportunity to notice their partnership in action. After I asked a question, one of them would have a response and often no sooner would he finish than the other would smoothly dove-tail an additional response. Some of the answers came from both of them contributing phrases in turn that fitted together like pieces of a jigsaw puzzle. It didn't look to me like a particularly conscious process, but it appeared to be a comfortable technique, without any taint of contentiousness, irritation, or competitiveness. They laughed a lot. See for yourself. Here is how it went.

How did you each get your start in your craft, programming and computer graphics?

Mark: I started with Sierra six years ago working for the Art Department designing packaging and documentation and what not, so I used my illustration skills there. My first computer graphics project was creating the graphics for *Winnie the Pooh* and the *One Hundred Acre Wood*. Then I did animation for *King's Quest II* and following that I did some animation for *Black Cauldron* which was the first project Scott and I worked on together. I believe that was also his first job creating source code for the games.

Scott: I didn't start doing this. It was an accident. I saw an adventure game before I worked here and I liked it. I had a job I hated and I kept bugging Sierra until they let me come and work as a

dealer returns person. And I kept learning things. I kept learning product in my spare time and learning how to support stuff. So I became a support rep for games and then for business products, then I ended up managing the support



Mark Crowe and Scott Murphy
Two Guys from Andromeda

department. Then the big crunch hit and I started doing QA work as well as support stuff. As I got closer to where they were creating the games I saw Mark and Doug MacNeill working on graphics for *King's Quest II* and *Black Cauldron* and I started bugging Ken (referring to Ken Williams, the company president) to let me try. I saw people working on programming and I knew that if they could do it, I could do it. So I kept bugging Ken and finally he let me try it. I put in a lot a free time over a summer spending nights out at his house debugging *Black Cauldron*. And then I ended up being the only one working on it. After a while Ken and Al Lowe bailed out on me. So I got *Black Cauldron* shipping and that was the first thing I worked on as far as a game. I got bit by the bug then.

It sounds like a story of persistence paying off.

Scott: Yes, exactly. Exactly.

How did you two get started together?

Mark: We were both working on *Black Cauldron* together. We're real-

Continued on page 7

FROM SUPERTRAMP TO SPACE QUEST III

AN INTERVIEW WITH BOB SIEBENBERG

by Kirk Green

For someone who has seen the heights of superstardom in the rock band Supertramp, Bob Siebenberg is a pretty down to earth guy. He gets up every morning and is at work in his home studio by 9:00 am and works till early afternoon when he heads out to a local baseball field to coach little league.

"Hey my greatest day is working in the studio and then heading out to baseball practice by 4:15pm," said Siebenberg.

Married, with two children, the 39-year-old Siebenberg has worked in his ranch home studio over the past few months on the



Bob Siebenberg
From rock band Supertramp

soundtrack for *Space Quest III: The Pirates of Pestulon* for Sierra. We spent some time with him recently, after he finished putting the final touches on his new solo album, to see how he became part of the Sierra family.

Most people are surprised when they hear that the drummer for Supertramp is producing a musical soundtrack for a Sierra 3-D Animated Adventure Game.

Continued on page 8

President's Corner



by Ken Williams

PRODUCTS OF THE FUTURE

I am constantly asked, and I constantly wonder, what the potential home penetration is for personal computers. By the turn of the century, will every home have a personal computer? Will computers be a forgotten fad replaced by intelligent telephones and supersophisticated TV's?

The answer to the computer acceptance question has a very real impact on those of us who own computers now. If the microcomputing community continues to grow, and eventually we become the majority of the general public, the potential of the home computer to change our lives is staggering. If, on the other hand, the number of computers in homes doesn't increase, the ultimate potential of the home computer will be severely lessened.

As one of the pioneers of the home computing business, I know that the development of the home market depends on software and hardware marketers coming up with suitable applications for the home. Home productivity and enrichment products like *HomeWord*, *Smart Money* and *Print Shop* are part of the answer, and games like *King's Quest* and *Police Quest* have helped to pull junior away from the TV set, but to reach total penetration, the home computer industry

must reach out and really show how computers can be useful as vehicles of communication and storehouses of useful information.

Over the last decade, I've searched long and hard for the ideas that will fulfill the home computer's promise. Recently, I've been encouraged by a few products that seems to point in the right direction.

Other than television, which I don't know if we'll ever be able to get rid of, magazines and newspapers are probably the most popular form of mass communication, and the most expendable. Because anything that is printed takes time to print, the communication offered by these vehicles is always old news by the time you get it.

Recently, through a joint venture, Sears and IBM introduced PRODIGY into select markets. Prodigy is a combination "on-line newspaper" and "interactive magazine" that really points out the potential of the computer to replace the written word. For those of you that don't know about Prodigy, I'll explain. Prodigy combines the information services of a CompuServe or PCLink, the fresh, useful information of the morning newspaper, and the well presented special interest information of a shelf full of current magazines into one service. The service is offered at only \$10 a month.

I look at Prodigy and say to myself, "This is a preview of the future." I boot it up in the morning, and I'm greeted with a "front page" that gives headlines on the major news stories of the day. Beside each headline is a number to punch to bring up the text of the feature, which is written in a professional journalistic style. After the front page, I can check the stock price of my company's stock (it's listed as SIER in the NASDAQ exchange, by the way) through Prodigy's DOW JONES service. Because I'm a West Coaster and Wall Street opens before I get out of bed each morning, the stock price I see represents

the price of my stock as it was within the last 15 minutes (not what it was after closing last night).

I can also catch the up-to-date price of other publicly traded home software companies or I can check to see if any of the top computer makers has finally made a big announcement. I also check the local weather, and occasionally the weather of the city I'm to travel to that day (Prodigy will give me a report for almost anywhere), and I always, always, read the *PC Industry Column* by Stewart Alsop III.

If I have time during the morning (but usually at night) I'll access one of the "interactive magazine" sections of Prodigy. Among the writers for Prodigy are Gene Siskel (of Siskel and Ebert's "At the Movies"), Sylvia Porter (finances), Jane Fonda (fitness), Julian Block (Taxes), and a host of others. Each of these people contributes a column worth reading, and the columns are written when news happens, not just once a week or once a month.

It's great to have this on-line magazine rack constantly available, but the best part of Prodigy is that you can write the writers. Recently I saw a Gene Siskel review of the movie PARENTS on Prodigy. As I enjoy such offbeat movies, and Gene appeared to have similar taste, I wrote him a quick note asking if he could recommend similar films. The next day when I booted up the service I had a short note waiting from Gene that contained the names of two other films I would like. Once, I didn't like a Stewart Alsop column, and I got my aggressions out immediately by sending him a note of disagreement (no response from Stewart was given or expected). I consider this interactivity to be the major plus of this interactive magazine format.

As much as I like Prodigy, I will be the first to say it isn't perfect and it won't replace magazines yet. The graphics of Prodigy are clunky and the service, being new, promises more than it seems to deliver at times. But Prodigy represents a good effort in the direction of quality home information delivery, and will progress with time. When a reasonable number of computers have 9600 baud modems and computers that can handle digitized pictures, I believe Prodigy will

Continued on page 18

POLICE QUEST USED IN REAL-LIFE POLICE OFFICER TRAINING

The following article is reprinted with permission from *LAW and ORDER*, October 1988. *L&O* is an independent magazine for police management professionals.

Product Spotlight: *Police Quest*—Review of a Patrol Simulation

You are hiding behind a bush in the park waiting for the drug deal to go down. It does. You have the evidence you need. You shout, "Halt! Police!" and rush out from cover.

Suddenly, the dealer turns on you and shoots. You go down. Blood is pouring from a fatal chest wound. The music starts and a warning sign appears on the computer screen saying you made a mistake in police procedure. With that, *Police Quest*, a computer-adventure simulation, ends.

Why, you ask, is a computer game being reviewed in a serious law enforcement publication? Because *Police Quest* is a serious training program.



When our department first received a copy of this program, I was determined that we were not going to turn our training computer into a game machine. After reading the documentation included with the simulation, and the background on the program creator Jim Walls—a 15-year veteran of the California Highway Patrol, I was sufficiently impressed to give it a try.

After placing the program in an area of the computer that only I could get at, I started the game. I quickly found that it was definitely based on good police procedure. If you did not follow those procedures you were soon in trouble. I looked for how much the element of luck influences

the game. Luck does not play a part in successfully completing the program. The simulation is based on skill and knowledge. Lastly, I looked for what specific training the simulation offers. At this point I was no longer thinking of the program as a game. The depth of training is enormous. With that, my last objection melted away.

The next test was to see what happened when others were introduced to *Police Quest*. The documentation that has to be read and understood is extensive. It is more difficult than the disk/video training materials we use on our computer system.

I introduced one patrol officer to the simulation and asked him to try it and tell me what he thought. When I returned from my vacation, I found that the number of saved simulation files had multiplied beyond what I had done, and even beyond that of my appointed tester.

It seems that other officers had observed him working on the simulation and had gotten caught up in the action. They demanded to have a turn of their own. It quickly turned into a mild competition to determine who could finish with the highest score. You can successfully complete the program with less than a perfect score, but the higher the number, the better you observed proper procedures.

I also observed that squad room conversation between officers was now less concerned with fishing and more oriented toward discussing proper procedures. These topics were raised by *Police Quest*. It is very unsettling to see yourself in the persona of Sonny Bonds getting blown away because he did one thing wrong. The fact that our officers were interested in such things—without waiting for one of our officers to actually get hurt—was very encouraging.

Our established computer/video training program on defensive tactics began to get renewed play. What at first looked like

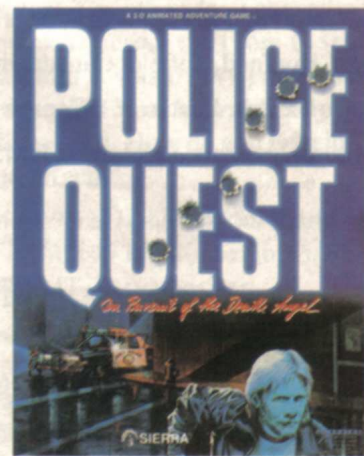
a fun little computer game, has proven to be a rather high powered training tool which our officers want to utilize.

“There is no rule that says training has to be boring.”

After the response I received in my department, I encouraged the Chief of another department to try *Police Quest*. He also was of the mind that his department's computer be used for business and not games. However, he received the same response from his officers that I did.

There is no rule that says training has to be boring. Making it more interesting will enhance the results. For experienced officers, it offers a reminder of what the full procedure is. For recruits, it demonstrates actual use of proper procedures safely.

I found an additional advantage for the experienced officer—the program's police humor and understanding of the saltier words in the language. There is a great relief in harmlessly venting your daily frustrations in dealing with the public.



The *Police Quest* package contains three 5 1/4 and two 3 1/2 inch disks. Therefore you do not have to specify which size disk you use. It is easy to put on a hard

Continued on page 8

TWENTY-FOUR HOUR AUTOMATED HINT LINE NOW OPERATIONAL!

Sierra On-Line now has a hint line available around the clock. Hints for games have been computerized, and are available to the public using a touch-tone telephone. The procedure is outlined below.

Customer Service representatives are still available from 8 a.m. to 5 p.m. Pacific Time, Monday through Friday.

How do you handle over 4000 calls a day?

TO CALL FOR A HINT:

Dial (209) 683-6858

When the call is answered, you will hear the following instructions:

For callers with a rotary telephone, stay on the line.

Callers with a touch-tone telephone may select an option from the following menu:

For the Game Hints Line press 1
For a Customer Support representative press 2

For a Technical Support representative press 3

Selecting 1 for the Game Hints Line will generate the following menu options:

For a hint on:

King's Quest Series press 1
Space Quest Series press 2
Police Quest Series press 3
Leisure Suit Larry Series press 4
Manhunter New York press 5

For a game not listed or a hint not addressed press 9

To return to the previous menu press 0

To hear the current menu again press *

Once you have selected a specific game series, you will be given a menu that allows you to specify which of the series you want. Within that choice, you will be given a menu for various sections of the game. Within that menu, you may select the hint that you wish.

At any point you may hear your choices again by pressing * or return one level by

pressing 0. You may continue back through the menus by pressing 0 until you have returned to the one of your choice.

MULTIPLE GAME HINTS

The options of * and 0 allow you to ask for hints on several games during the same phone call by accessing different levels. For example, select the first game, and descend through the levels of that menu until you receive your hint, then use the 0 choice to return upward through the menus

**With 32 open hint lines
 -24 hours a day
 (209) 683-6858**

until you reach a point where you wish to be to select a second choice, either within the same game, or all the way back to the point where you can select a different game series.

As of April, we have rewritten the hint line to include more detailed information, and more hints. If the hint you are listening to is somewhat lengthy, don't forget you can listen again by pressing *.

Cartoon/Drawing Contest

Winners in this issue:

Cyril Chong, Hong Kong, page 26

Gary Clements, El Cajon, CA, page 18

Jason Crawford, Tofield, Canada, this page

Cameron Fitch, Landrum, SC, page 26

Brandon Granzow, Los Lunas, NM, page 12

Up till now Page+ had only done what seemed most sensible, but the [DON'T TOUCH]! button was irresistible...



Jason Crawford

Scott Lucchesi, San Jose, CA, this page

Tony Spencer, Everton Hills, Australia, page 30

Hannes Högni Vilhjálmsson, Reykjavik, Iceland, page 30

Daniel Wellman, River Forest, IL, page 25

Sierra's Cartoon and Drawing Contest is an ongoing event, so send in your submissions now! Winning entries will be published in the Sierra Newsletter, and winners will receive a Sierra software product of their choice. The number of winners will depend on the quality of the entries, and are chosen at the sole discretion of Sierra On-Line.

Cartoons or drawings must be in black ink (not in pencil or in color) on white unlined paper (please do not fold). Each entry should relate to one or more of Sierra's products. All submissions become the property of Sierra On-Line, Inc. Submit entries to Sierra On-Line, Box 1103, Oakhurst, CA 93644, Attention: Drawing Contest, and indicate the product desired and type of computer you have in the event you are a winner. Good Luck!

THE EXPERT



Scott Lucchesi

ly into science fiction and space and that sort of thing and together we decided to work up an idea for a game that would deal with that genre—science fiction—and we wanted it to take place in space. So we put together a demo. I did the graphics, and Scott did the code.

Scott: We showed it to Ken and he said sure it looks like a game. Go with it. About a year earlier we had asked Ken about a space game and he said no it doesn't sound good. So this time we just had it all ready and showed it to him, rather than just approaching him with an idea. And once he saw what was on screen and how it looked and how it felt, that really helped a lot. Mark's graphics did a lot, too.

How do you two work, together or apart?

Mark: We both have a real strange sense of humor. So we bounce weird ideas off each other and use each other as a catalyst.

Scott, as an aside: Fortunately for people who play the games, most of them don't get in.

Mark: We spend time working alone at our houses and we work together here at Sierra. It works out real well.

One of the things I really enjoy is the humor in the games. How do you go about trying to cover all the bases that a user might try.

Mark: You have to sit down and go through each picture and try to put yourself in the mindset of someone who has never seen this before. You have to ask yourself if you were walking around in this world, what would you try to do.

Scott: You can only do it so well, unfortunately. That is where QA people and the Beta testers come in. They type in weird stuff and sometimes that may prompt a weird response, and it will end up staying in the game. Something specifically addressed to one person gets into the game and sometimes it sounds funny enough and

it stays. I keep finding messages that I forgot I put in.

How long does it take you to design a game from conception to shipping?

Mark: We've been on this one for a little over a year.

Scott: But this one was a special case. We have a brand new development system. I had to learn a whole new language to program. The other two were done on AGI and this is SCI. (Editor's note. See article in this issue about The Making of King's



Quest IV for more information on the two.) Totally different worlds. I had to learn something and understand something I had no concept of to start with. The other two came out in a period of approximately 9 to 11 months. So we were pretty consistent there. We don't start out with a huge document. We start out with a couple of ideas, where we are going to start and where we are going to end, and some of the things that are going to happen in between, and work our way there.

Does it change substantially from your original design by the time everybody else who is involved in it gets through?

Scott: Not a great deal.

Mark: We always start aiming really high and we always fall short of our goal, I think, but in the long run we come up with a pretty good product.

Our customers are beginning to become familiar with SCI and AGI. How is it different to work with SCI, from your point of view?

Scott: It has its advantages. First of all, you have better resolution on the screen.

The graphics look a lot better. Mark has more room to work. You have more control of what's going on in the screen. There are a lot of neat things for the programmer, but at the same time when you get those neat things you also get more neat ways of messing up. (They both laughed here.)

I was fascinated with some of the depth perspective I saw. For example in the opening credits—the letters are in the foreground and the stars far in the back.

Mark: The new interpreter has allowed us to come up with a lot of great special effects and from a graphics standpoint the new language gives us twice the resolution. I don't want to say pictures take twice as long, but they do take a lot longer because you have more to work with. You can put more detail in the graphics. Folks out there will have to be a little more patient about

how soon we can get these things out.

Scott: Before, Mark had a limited area to work in and he could only do so much. Now he's tempted to think "Wow! I could do this," or "Maybe I could add that." So he's trying to restrain himself.

I wanted to ask about the sound effects, too. The other day I chased a wind sound clear across the room to see what it was, and it was from Space Quest III. It was so real I could practically feel the chilliness of it. How do you develop your sound effects?

Mark: That is the work of Mark Siebert, our in-house music person using the Roland MT-32 synthesizer.

Scott: Mark (Siebert) has learned a lot of ways to push the synthesizer around and make it do things. He's come up with good effects that weren't available for some of the earlier games. We are benefiting from his time on the earlier projects.

I understand the MT-32 is the equivalent of 8 synthesizers in 1.

Continued on page 25

How did you become involved in the project?

There was an advertisement in the paper.

No, really.

Yes, I was reading the *Sierra Star* (a local paper) and there was an ad for some one who knew how to work with MIDI. I had just come off the *Free As A Bird* tour with Supertramp and I was looking for something new to get involved with. I met with Rick Cavin (*Sierra* General Manager) and right away he realized I wasn't the

"There are no short cuts, it is just me putting in the time producing the music."

nine-to-five guy he was looking for, but on the other hand there might be something that I could do—write music for some of the new games.

So one thing led to another and soon you were writing a soundtrack for *Space Quest III*.

That's right. I got some equipment from *Sierra*: a Macintosh, a Mastertracks Pro and the MT-32 and used it with my own equipment. That includes MIDI keyboards, my 24 track Otari tape deck, and a Neotek recording console. I do most all of my work at home in my own studio. Over the years I've spent so much time away from my family—that is why I moved up here, to be able to work and spend time with my family. In fact my last solo effort was completely recorded at home.

How does the whole process unfold when you are working on music for a game? Where do you start?

I like to start with the image. The creators, Mark Crowe and Scott Murphy, give me a VHS cassette of what the game looks like. I pick their brain about what a certain character's personality is like. The music should enhance the personality. Then I just put in the time writing and producing. I look at the game as a little movie and the music as the soundtrack for that film. It is challenging to come up with something that Mark and Scott want in the way of music. The feel of the music, rather than simple melodies, using the MT-32, Ad Lib or IBM music cards adds a vibe to the whole screen.

Some of the music on *Space Quest III* is very beautiful, on a level of an epic film score. Then you have music such as "Festers Theme," which is light and funny. Where do you draw your ideas from?

I just pull it out of thin air in a sense. I just put in the time needed to produce the music. Something I tried to achieve with *Space Quest III* is to expand the size and dimension of the game with music.

How does the work on *Space Quest III* differ from your solo album or work with Supertramp?

Working in the band (Supertramp) you have four or five people and I'm part of that band. For my solo projects and working on the soundtrack to *Space Quest III*, it is down to me. There are no short cuts, it is just me putting in the time producing the music. With the game music I can be a little goofy, like with "Festers Theme," that wouldn't work in my solo projects.

Sierra has had William Goldstein and you write and produce music for our games. Do you see any of your fellow musicians doing similar projects?

Some of the people who worked on my solo record thought that the graphics and music was a great concept. I'm sure there are people who would want to jump on it, but I still want a job too!(laughing)

You've talked a lot about this new album you have been working on...

Yes, that is "Long Shot," an album I've done with a band I formed with Dennis O'Donnell called Heads Up. For right now it is being released in Germany on Polydor Records. Germany is actually the second largest market for music in the world. So we'll see how it does and eventually we might release it in the UK and the US. The album has a lot of keyboards and new sounds from different keyboards, but it is not computerized. We've got Reno Wilde doing lead vocals, Scott Gorham from Thin Lizzy on guitars and three members of the Supertramp tour band playing on the album. It has got a Procol Harem feel to it and we had John Punter, who worked with Procol Harem, produce the album.

How about Supertramp?

Supertramp is still together technically. Sometimes when you are with a group for a long period of time you want to branch

out and get away from the pressures that are part of the band. Then when you've spent some time away you appreciate the dif-

"I would like to hope that someday the five of us (Supertramp) would get together again."

ferent things that made up the band. I would like to hope that someday the five of us (Supertramp) would get together again.

So what is in store for Bob Siebenberg in the coming year?

Well I hope to do more for *Sierra*. I enjoyed working on *Space Quest III*. I want my solo work to do well and I'd like to win the 13-year-old All Star Division in little league.

Sounds like Bob Siebenberg has the best of both worlds and has his priorities straight. ■

Police Quest Review continued from page 5

drive as copy protection has been eliminated. This also means that back-up copies can easily be made for floppy disk drive only use. You also receive a map of the town of Lytton. This is handy for learning the patrol area. The Indoctrination Guide is a must read. It covers everything from law to personal hygiene. When starting the simulation, you find yourself in the station hallway in the persona of Sonny Bonds. The shift is about to begin and you have to obtain your equipment and go to the shift briefing. During the course of the simulation you have several tours of duty. You will experience real-life law enforcement situations and be asked to make decisions which will effect the outcome of the simulation. You will meet the lowest of the low, high-rollers, ordinary citizens and even a few women that your mother—and definitely your wife—would not approve of.

If you do well in the game you will rise to undercover narcotics detective and solve the case. If not, well, you will spend a lot of time using the restore game command. ■

This review was written by Sgt. Harry Johnson of the Allegan Police Department, Allegan, Michigan.

SILPHEED

New Sequel To *Thexder*

by Nancy Grimsley

Silpheed, a new arcade game imported from Game Arts in Japan by Sierra On-Line, is the follow-up to *Thexder*. You are



the pilot of a super dogfighter with a mission to save the galaxy. No sooner do you begin the game than battle is joined.

BATTLES

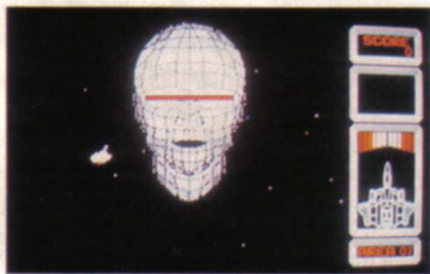
You will fight your way through twenty battlefields in space, then will engage Xacalite, the evil warlord, in one last

"You start *dreaming* about the battles..."

Jennifer Cobb, QA

stupendous battle against a gigantic enemy ship.

The intensity grows from level to level. The program *automatically* saves your last



level and your highest level. Even after you quit playing, then return, you can immediately select either the last level you had achieved, or the highest level ever reached.

WEAPONS

Before each new battle you will select the weapons to use. Every 50,000 points you get a newer and more powerful weapon, until finally you have a choice between five weapons and five different firing patterns. Bonus targets on the screen will gain you more weapon power, more speed, and needed repairs.



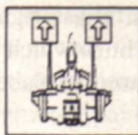
FORWARD BEAM



PHALANX BEAM



V-BEAM



LASER CANNON



AUTO-AIMING

STRATEGY

To win, it will be necessary for you to develop a different strategy on each level. As you observe the maneuvers of your opponents you will—if you are alert—detect patterns that will allow you to design your plans to meet the enemy in combat. Do you fight? Do you evade? Which weapon will be most effective? Which enemy do you attack at once? Each enemy—and there are over twenty unique types—has a different pattern. Your weapon selection becomes critically important. Only you can make Xacalite surrender, and you can only do so by developing the most effective and most threatening battle techniques.

Your ship can dart over most of the screen as you use your joystick, arrow keys,

or a combination. At various times you will have the advantage of a barrier or a shield.



MUSIC

There are eleven original music scores. If your computer has expanded music capabilities—the MT32, the Ad Lib, the IMF, the Apple IIGS—your enjoyment of the game will be enhanced by dramatic music. Standard PC and PCJR music hardware are also supported.

CORRECTION

Takeshi Miyaji is the designer of *Silpheed*. When the manual for *Silpheed* was originally printed in this country, credit for the game design was incorrect. Our apologies to Mr. Miyaji for the error. ■

SIERRA'S TOP TEN BEST SELLERS

January - March 1989

Space Quest III

Silpheed

Leisure Suit Larry II

King's Quest IV

Police Quest II

Manhunter

Goldrush!

Leisure Suit Larry I

Helicopter Simulator

Thexder

CUSTOMER SUPPORT FORUM

Help! I'm Stuck In A Loop!!

by Kerry Sergent

Technical Support Representative

You say your new game just sits there balefully blinking its cursor at you as if in gloating revenge? Or maybe it just keeps asking you to "INSERT DISK ONE." Or worst of all maybe it displays a cryptic message that says "Unable to Allocate Heap" and calmly returns to DOS.

For those of you who care about your Heap and wish to keep it under control, we at Sierra On-Line's Technical Support are ready to coax some of the most reticent computers to life with answers to almost every conceivable compatibility problem. Although we cannot make claims to be able to solve every possible dilemma, we do care and will try our level best to make your game function within your systems constraints. With a few simple diagnostics we are usually able to offer advice or at least a kind word of condolence if your brand new Neo-Clone Computer complete with The Really Good-Time Graphic Adapter refuses to display a single pixel of your game.

Take the most common problem that occurs in MS DOS compatible systems: The TSR conflict. A TSR is computer lingo for "Terminate and Stay Resident." These programs, frequently called "Memory Resident Programs," are usually loaded into memory at system bootup and remain resident in RAM. There they reside, available to be called up later at the touch of a key.

Unfortunately, since our programs are quite demanding of your computer system's resources, most TSRs can bring a really enjoyable session of gaming to an abrupt and frustrating end. A number of



by Liz Jacobs,
Customer Service Manager

Over the past three months 35,000 people have been serviced through our BBS service. These 35,000 people totaled over 180,000 calls! Between our automated hint system and our Customer Service Department another 4000 calls a day have been answered!! To accomplish this, Sierra had put in over 20 new phone lines, taking us to over 35 incoming lines. These figures do not include the 800 lines which are available to anyone wanting to place an order.

However, for some of you, it may be VERY hard to believe that a Sierra Customer Service actually exists. But, it is true. As a company very concerned with not only the quality of our product, but also the quality of our customer service, we are aware of the frustrations that you, our loyal customers, have been experiencing due to the phone system. We do understand that you need and should expect the support that is required in order to enjoy our games thoroughly. We ARE committed to that business principle. At this very moment we are meeting with AT&T and our

solutions exist to tame the TSR. You can remove them from the AUTOEXEC.BAT file on your system disk, you can rename your AUTOEXEC.BAT to another file name, you can boot using a plain DOS diskette with no AUTOEXEC.BAT file, or if you have the skill to manipulate your computers memory you can command

If You've Had Trouble Reaching Customer Service . . .

local phone company, making arrangements for the type of phone system that will give us virtually unlimited lines to be put in place. We will be separating the "hint line" from the customer service line, making it quite easy to get through to Customer Service. We are IMPROVING our automated hint system by expanding many of the existing hints, and allowing you, the audience, to get an unlimited number of hints!!! ALL of the game hints will be on line by the end of April. There will be NO twenty-minute holding sessions, no "hang ups"...only easy access to both the hint line and Customer Service! We are very excited about these additional improvements. EVERYONE that tries to reach Sierra On-Line...will. Many of you are probably wondering if your redial finger will ever come out of traction! Others have been told that "all lines are currently busy...please hold for the next available customer service rep," only to be hung up on!

We ask you to accept our apology, and trust that the company that can bring you *King's Quest IV*, can also bring you premium quality service. Thank you for your patience. ■

most of them to be located out of harm's way. The popularity and convenience of TSRs cannot be denied, but if used indiscriminately they can wreak havoc on other programs.

Of course, if your dog ate your disk you may still have difficulty getting that game to boot. ■

Use A Modem To Get Your Hints and Help — Here's How!

by Robert Lindsley
BBS Representative

If you purchased your computer anytime in the last three years, chances are much better than 50/50 that your computer is equipped with a modem. If you're one of the lucky majority that owns a modem for your computer, you should know about Sierra's ongoing commitment to support for BBS's and the telecomputing community.

At this time, Sierra personnel monitor five national on-line services in an effort to support game players. These personnel scour the boards each day looking for people who need hints on Sierra adventure games, have technical questions, or just want to know something about the author of their favorite games. Many of the Sierra specific questions concern hints for the games. We find most of these are answered by other users of the bulletin board. (Bulletin board users are incredibly helpful to each other.) Technical questions, especially questions regarding Sierra's new efforts on music card support, make up the majority of the other current topics. The national boards currently monitored by Sierra are:

- » Prodigy (PC Club bulletin board)
- » CompuServe (Game Vendors Forum and MIDI Forum)
- » GENie (Sierra Forum)
- » AppleLink (Sierra Forum)
- » PCLink (Sierra Forum)

Help on Sierra games is not all that you can get from these information services—but if you need help, you can usually find the answers you need on one of them. Because these boards can be accessed from most areas of the US and Canada as a local call, they are an inexpensive and convenient source of answers for your questions. All of these national boards have unique features, including user interfaces that range from power user specific to beginner friendly. Review them all and decide which one is right for you.

In addition to our work on these national systems, Sierra also maintains its own bul-

letin board. On this board, users find an automated hint database where they can quickly and easily find the answers to Sierra game puzzles. Users with more complex questions about their Sierra products can access the technical support area of the board. In this section users can leave technical questions for Sierra Technical Support Representatives. These questions are almost always handled in one business day, and the users will find the answer to their questions posted back on the board. Another area gives current information on what new products are on the way and the latest information on when they will be available. One of the most used sections of the board is an area that lets users download demonstration software for Sierra game products (including the occasional "first glimpse" of a Sierra product that is not yet available). Recently, device drivers for music cards have also been added for download. (See following article.)

The next time you need to call Sierra for a hint or technical service, and the line seems to be tied up with other callers, remember that your modem is your secret weapon in your quest to get the hints or other information you need. Through CompuServe, Prodigy, GENie, PCLink, AppleLink, and Sierra's own bulletin board, there's a ready network of Sierra personnel and other gamers eager to lend a hand. It's convenient, painless, and could end up costing you a whole lot less in phone bills.

For more information contact:

CompuServe	(800) 848-8199
Prodigy	(800) 822-6922
PCLink	(800) 458-8532
GENie	(800) 638-9636
AppleLink	(800) 227-6364

Sierra BBS (modem)
(209) 683-4463

MIDI Drivers Available For Downloading On Sierra BBS

by Robin Bradley
Customer Support Representative

The Sierra BBS now has information you can download to help make your current sound card or MIDI device work with our new SCI games.

Access the Sierra BBS: (209) 683-4463.

While in the main menu:

» Select # 3 for *Library of Files*.

For downloading software:

» Type *S* for *Select Lib*.

» Then type *music*.

» Next type *F* for *File Directory*.

This will show a list of the documentation files and several drivers that will help a particular sound card run a little better.

Let's use *PQ2 music.doc* as an example. If you have a Cheese Box 1000 synthesizer you can adjust the instrument sounds to emulate the Roland MT-32.

Once in the file directory:

» Select *d* for *download*.

You will be asked for a file name.

» Type *PQ2 music.doc*.

The next question is how do you want to download the file. For downloading documentation files you may want to use ASCII text protocol, but for other demos and drivers you may want to use X Modem.

» For X Modem press *M*

» For ASCII press *A*

When you select *A* (ASCII) you will want to select a text capture on your computer so you can capture all of the information we are sending out. You will be given the option to cancel using Control *X*. Select the download option from your computer to begin the procedure.

For X Modem you may select File Capture or Disk Capture. Let's say we select *M* for download X Modem. The computer will prompt you when it is ready for X Modem download. Select the download option from your computer to begin the procedure. ■

Sierra BBS Has Space Quest III Demo

by Robert Lindsley
BBS Representative

Space Quest III: The Pirates of Pestulon is Sierra's hottest new animated adventure game. If you would like to see the game before you buy it, you can download a demo from the Sierra BBS.

This demo is currently on-line for both the MS-DOS machines and Atari ST series with other machine versions to follow.

If you would like to download the *Space Quest III* demo:

Access the Sierra Bulletin Board with your Hayes Compatible Modem. The phone number is (209) 683-4463.

From the main menu, select 3 (Library of Files). You will then *Select a LIB* (which stands for Library Information Bank) where our files are stored. The demos for downloading are stored in the following LIBs:

- » MS-DOS, select *DEMOS*
- » Atari ST, select *ATARIST*

Select the file you want to download. Type *D* for download, and you will be prompted to input the filename. The file name for the *Space Quest III* demo is *SQ3DEMO.ARC*.

Select the protocol you wish to use. We suggest that you use XMODEM or YMODEM protocol, depending on the baud rate of your modem. Select the download option from your terminal. The data that you receive will be in a compressed format. If you do not already have access to a file decompression program,

you can download a decompression program from the Sierra BBS. For MS-DOS, the file decompression program is UNARC.COM and for the Atari ST it is ARC.TTP. Download it the same way you downloaded the *Space Quest III* demo. Instructions for UNARCing are included with the ARC manager.

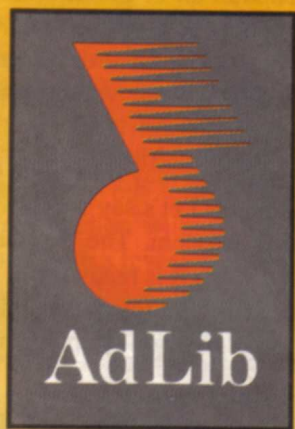
Brandon Granzow, Los Lunas, NM, submitted this cartoon about "*Leisure Suit Larry*"



Run the INSTALL program and select the type of music card and graphics card (if applicable) you have. You will then be enjoying the demo brought to you by The Two Guys from Andromeda.

We hope you enjoy it. ■

QUALITY MUSIC OUTPUT EVERYONE CAN AFFORD



AD LIB MUSIC SYNTHESIZER CARD



Take advantage of the sound potential of your personal computer with an AdLib Music Synthesizer card.

Powerful, yet affordable, the AdLib card utilizes the same music synthesizer found on many popular electronic keyboards to enrich computer sound and bring your games to life.

Sierra games now feature full stereo soundtracks composed and performed by such professionals as Hollywood composer William

Goldstein and Supertramp's Bob Siebenberg. These games support the AdLib music synthesizer card and other sound cards. You can also use the AdLib Music Synthesizer Card to compose music of your own on your own personal computer.

With enhanced sound, you'll be able to hear the full effect of Sierra's dazzling music soundtracks, and dozens of realistic synchronized sound effects.

Find out more about the AdLib Music Synthesizer Card by ordering Sierra's **FREE** Music Demonstration cassette.

Adventure games never sounded like **this**.

Call Sierra and order your FREE Demo cassette today!

1-800-344-7448

**Outside U.S.: 209-683-4468,
Sales Department**

AdLib Music Synthesizer Card is \$195.00. *AdLib Music Synthesizer with Visual Composer* is \$245.00.

PIRATED COPIES OF LEISURE SUIT LARRY CONTAIN VIRUS

or

“CRIME DOES NOT PAY”

By Nancy Grimsley

Who of us, growing up, hasn't heard the words, "Crime does not pay." Often spoken in jest and embroidered with impressive vocal dramatics, there is still plenty of truth in the saying. In the computer world, the growing problem with the "computer virus" phenomenon is giving new meaning to the phrase when it is applied to pirated copies of software.

Sierra On-Line has been hearing from users around the world that pirated copies of *Leisure Suit Larry* are infected. And before I go further I would like to interject Sierra's absolute assurance to our customers that software leaving our plant does NOT contain the virus. Buying original copies of software from a reputable dealer is the consumer's best protection from any virus.

A customer in the Netherlands wrote:

...The game *Leisure Suit Larry* is quite famous here in the Netherlands... Some civil servants in the Dutch government played this game illegally on the government network. This game, however, concealed a virus, which, upon reaching the high-score, deleted the whole financial administration. That day LL became headline

“Leisure Suit Larry is quite famous here in the Netherlands... Some civil servants in the Dutch government played this game illegally...and deleted the whole financial administration.”

news here. But that was their own fault, they should have bought an original version of the game...

Another customer from Austria said:

“My wife and I enjoy playing your games. Here, in Austria, we have *King's Quest II* through *IV*, with *Leisure Suit Larry II* stuck in Customs. We'd like to buy more

of your games, including the original *Leisure Suit Larry*. However, we're rather disturbed by reports we've heard from Vienna, Germany, the U.K., and the U.S.A. about Larry containing a virus that destroyed all data on all disks in the machines it's running on. Can you assure me that no original copy of *Leisure Suit*

Here, in Austria, we have *King's Quest II* through *IV*, with *Leisure Suit Larry II* stuck in Customs.

Larry I is infected and that none of your products contain any damaging (or potentially damaging code) when they are first

packaged? The latest game to arrive is *KQIV*. We've barely spent an hour with it,

Sierra's absolute assurance to our customers is that software leaving our plant does NOT contain any virus.

so far, but are extremely impressed by the superb quality of the graphics—as well as with the many ease-of-use enhancements and the improved level of complexity. It's really excellent.”

Among several newspaper articles on the topic from the United Kingdom are the following from *New Accountant* and *Financial Times*. ■

London, November 30, 1988

Financial Times

Leisure-suit Larry's pirates hit computers

By Paul Abrahams

A COMPUTER VIRUS CONTAINED IN A game called "Leisure-suit Larry" has struck a number of banks and trading houses, with some dealers reported to be so frightened of the damage the virus was causing to data that they refused to use their terminals.

The virus, which was first reported in Switzerland and West Germany eight weeks ago, arrived in the City soon afterwards, but its full effects are only now becoming clear.

Mr Garth McLeod, managing director of International Data Security, the London-based information management and security consultants said: "A number of major institutions in London appear to be having problems. Some PC users are losing the complete contents of their hard disks."

Mr McLeod explained that the virus is contained in the code of "Leisure-suit Larry's" program. When the diskette with the game is loaded into the computer, the virus copies itself to the hard-disk. After a pre-determined time or a certain amount of use, the virus obliterates any data stored on the hard disk.

Computer games have proved increasingly popular since the fall in trading volumes experienced after the crash of October last year. Dealers have filled in their work hours by playing games. The adventures of Larry the Lounge Lizard, the character in the game containing the virus, have proved particularly popular because of their salacious content.

"The problem is that managers with no background in computers have failed to grasp how important it is to have correct procedures to protect data," said Mr McLeod. "Games containing viruses can crash entire systems—and

most companies are now unable to run without their computers."

A leading London merchant bank said it had called in computer security consultants to check its network. The bank knew of a number of employees playing "Leisure-suit Larry," but no problems had yet been found.

Activision, the Reading-based software house that distributes "Leisure-suit Larry" said the original game did not contain a virus. The company said the best defence against viruses was to use original rather than pirated software.

London, December 5, 1988

New Accountant

Louche Larry infects City

The cut of Leisure Suit Larry's jib is causing consternation in the City. He is the "original blind date nightmare" and the kind of guy you "wouldn't want your daughter to meet, let alone date."

But he is carrying a deadly virus that threatens to wipe out the Square Mile.

Idle traders, with nothing better to do since the fall in volumes, have been whiling away the hours playing "Leisure Suit Larry in the Land of the Lounge Lizards" ...

For Larry inhabits the world of an extremely popular computer game, bootleg versions of which have been implanted with a virus.

Idle traders, with nothing better to do since the fall in volumes, have been whiling away the hours playing "Leisure Suit Larry in the Land of the Lounge Lizards" and have unwittingly transferred a "time bomb" into their firm's system.

PRODUCTS FOR YOUR COMPUTER

by John Williams

MS-DOS

MUSIC OUTPUT DEVICES ARE THE HOT NEW HOME PERIPHERAL

PC'S SOUNDING BETTER AS PUBLISHERS RUSH TO SUPPORT NEW CARDS

With the introduction of *King's Quest IV* in October of last year, Sierra hoped to turn the industry's attention to the problem that the PC has had for a long time—its lack of sound capabilities. With the exception of the Tandy 1000's with their 3 voice sound and the ill-fated PCjr, MS-DOS machines have been capable of a little more than a "beep-beep" for all too long.

King's Quest IV came with drivers for new hardware devices, the IMF from IBM, the MT-32 from Roland, and the AdLib Music Card. When we introduced these music cards (and *King's Quest IV*) to the public, we fully expected our words to fall on deaf ears. We were pleasantly surprised.

The computer owning public has been very receptive to the new music cards. AdLib, in particular has been a very big seller and is now carried in well over 1,000 stores throughout the U.S. and Canada. Roland has had trouble keeping up with demand for their top-of-the-line MT-32 and another player in the music card fray, Creative Music Systems, is beginning to

pick up some sales with their low cost CMS board.

While we were pleased to see our work was appreciated, we were really surprised to see how fast our competitors were ready to jump on the music card bandwagon. Many of our competitors ignored EGA cards as unimportant until very recently, so their willingness to work with the music card people came as a shock. Expect music card support from top publishers like EA, Konami and Microprose sometime in the near future.

If you still haven't learned about the magical difference a music card can make in your machine, you can find more information in the Winter '88 Sierra Newsletter, and use the order form for Sierra's sample music cassette or call Sierra's Order Desk at 1-800-344-7448.

HELPING JUNIOR GROW INTO A REAL COMPUTER

\$130 UPGRADE TURNS JR INTO AN AT STYLE 9MHz SCREAMER!

After years of productive computing, (made possible by Tecmar and other makers of PCjr expansion chassis) users of IBM's orphaned PCjr are beginning to feel left behind. As software gets hungrier for the faster processing speed of today's 12 and 16 MHz 80286 and 80386 machines, and as the minimum memory requirement for more software grows to 512 and 640K, PCjr owners are feeling themselves once again abandoned.

The PCjr, with its slow 4.77MHz 8086 CPU has trouble with complex processing tasks such as the complex animations of Sierra's new SCI Adventure Games. On a standard PCjr upgraded to 640, it takes an animated character almost 23 seconds to move across the screen in *King's Quest IV*.

HOMEWORD II for MS-DOS

Users of *HomeWord* would not readily recognize the *HomeWord II* program on the screen. The features available in the new *HomeWord* make it extremely attractive as a word-processing package.

Users of the old *HomeWord* are used to a series of menu choices that one descends through to get menu selections. *HomeWord II* has a pull-down menu across the top of the screen, accessed by mouse. Documentation on the features is available on-screen through extensive help screens. There is an on-line tutorial, and a small reference manual for setup, installation and troubleshooting.

Features include:

- » **Cut and Paste** capabilities
- » **Spellchecker** (set it to signal you as you type, or select all or a por-

tion of the document to check when you wish)

- » **Thesaurus/Dictionary** on screen
- » **Outlining**
- » **Footnotes**
- » **Search and Replace** (seven combinable functions, such as search only, search and replace, ignore the case, search backwards, replace this occurrence only, replace all occurrences, query first before each replacement)
- » **Page Layout**, including Headers, Footers, Custom Page Numbering, Margins and Alignments
- » **Graphics** integration (integrate graphics from drawing programs into text files or create logos consisting of any combination of text and/or graphics).

Full product price: \$69.95

Likewise, loading a spreadsheet of 128K or more give the PCjr adequate time to make a sandwich and do the ironing.

Now, thanks to the work of Pat Calabria and his company, PC Enterprises, PCjr owners have the opportunity to upgrade their computers with a new processor of

amazing speed. Called jrExcellerator, PC Enterprises' new PCjr add-on increases the speed of the PCjr to 9.54 MHz, roughly twice the speed of a PC/XT.

It's a great product that saves time and money, and it's compatible with about every software product we have tested.

We think that the jrExcellerator is a "must have" for PCjr owners that are looking to keep pace with today's more powerful machines.

Contact PC Enterprises, P.O. Box 292, Belmar NJ, 07719 or call them at (800) 922-PCjr. ■

APPLE II FAMILY OF COMPUTERS

NEW THEXDER FINALLY AVAILABLE FOR APPLE IIe/IIc/IIc+

JAPANESE ARCADE GAME ALMOST IMPOSSIBLE TO CONVERT

Sierra's best seller of 1987 and an all time best seller in native Japan, *THEXDER* is finally available for the Apple IIe/IIc with 128K. It took programmers well over 16 months of programming to bring *Thexder* to the Apple II, but the results are well worth it.

This action packed arcade game, starring a futuristic robot that folds up into a jet plane at the touch of a button, features great graphics and smooth animation some thought not possible on an Apple II. Originally designed for Japanese computers with quick processors and super hi-resolution monitors, *Thexder* is animation intense—it took lots of time and patience to squeeze it into a 128K machine.

Gameplay, through keyboard or joystick, is fast moving, and game puzzles require brainpower so the mind is chal-

lenged as well. This combination has made it a hit on two continents.

Thexder is now available at a suggested retail price of \$34.95. Check it out at your local software store.

KING'S QUEST IV SHIPS FOR APPLE IIe/IIc/IIc+

MEGA-EPIC SPANS BOTH SIDES OF EIGHT 5 1/4" DISKS

King's Quest IV, which was Sierra's 1988 best seller and the best-selling animated adventure game in microcomputing history, is also now shipping for Apple II owners. This mega-epic is large in both scope and sheer size. Occupying 16 disk sides, with over 140 screens, *King's Quest IV* is Roberta Williams' largest Apple II product since her 1983 effort *TIME ZONE* (still the largest game ever written for the Apple II).

King's Quest IV, which continues the story of King Graham of Daventry and his royal family, is perhaps the toughest Sierra adventure ever released, and is not recommended for beginning adventurers. Hint Books for *King's Quest IV* are also now shipping. ■

IIGS SMART MONEY

If you have a IIGS and are using the 1.2 Smart Money (IIE/IIC/IIGS version), you will be *delighted* with the upgrade, even though the cost is \$25. (We regret to say that an earlier price of \$15 was a misprint.) The IIGS specific version has all the same features available plus:

- » Pull-down menu
- » Full mouse support
- » IIGS dialog boxes

» Convert data files from 1.2 version of *Smart Money*

» Export your data files to *AppleWorks*

A new 170 page reference manual specific to the IIGS *Smart Money* has been prepared and will be included in the upgrade package.

Full Product: \$79.95

Upgrade: \$25.00 plus cover of Manual.

ATARI ST

SIERRA FINALLY DELIVERS MIDI MUSIC AND HIGH RESOLUTION GRAPHICS

ATARI ST AUDIENCES HAVE IT ALL WITH INTRODUCTION OF NEW GAMES

Sierra was one of the very first publishers of products for Atari STs, but until now, its works have always been met with a little bit of a controversy in the Atari ST community.

Although most Atari ST gamers agreed that Sierra adventure games show more variety and playability than other graphics based adventures, they all came away wanting more because the graphics and audio output of the products were not up to par. Atari ST enthusiasts appreciated overall design of the games, as well as the software support the company gave the Atari ST, but they always felt the best capabilities of their Atari ST machine were ignored by Sierra.

With the new SCI products now available, the demands made by the Atari audience have been addressed.

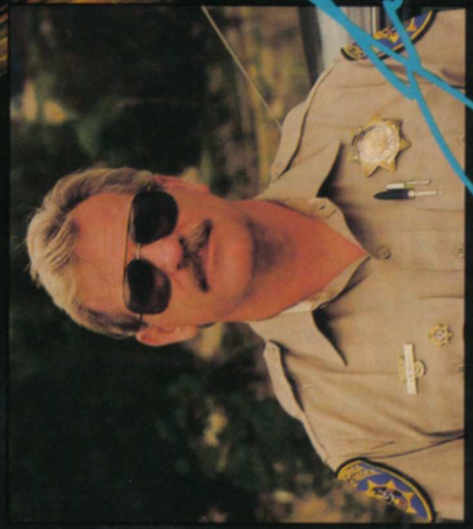
SCI is Sierra's new Creative Interpreter, a programming language the company developed to address the needs of today's 16-bit computers. Its biggest improvements over other games include improvements in graphics resolution, music output, and adherence to the graphical interface supplied in the new machines.

Continued on page 22

THE
S
E
E
E



The Vengeance



John Walsh

service those people with information in digital picture format. When that happens, I think magazines will have serious competition. As it stands, Prodigy already offers a great deal of user value for a very low cost (about the same as a monthly newspaper delivery). It's the kind of product that will further establish computers in homes.

A second product, or rather genre of products, that has cropped up lately is what I call the "interactive reference book." I came across one of these packages recently that I think is a great example of what future text and reference books will be like. It's called PC Globe. In its simplest form, PC Globe is like an Atlas. The main screen for the product opens up with a map of the world, and when you select any country, the computer will provide the information on it. The neat part about PC Globe (and other products like it) is that not only do you get the basic information that a reference book would give, but also it puts the information in a format where it can be easily worked and played with.

For instance, if you are leaving for a foreign country, you can access PC Globe, pull up a screen and type in the current exchange rate for the country you're going to, and the computer will then automatically convert your money into the countries equivalent. If you tell the computer where you are right now, it will tell

you how many miles away the place you're going is.

The real value of PC Globe comes out when you watch a kid use it. I had some interesting discussions with my teenage son when he started using the "compare" function of the product. He chose the United States, and chose to compare it with the top ten countries in areas such as infant mortality, relative age per capita, and other demographics.

Why does the United States have a higher infant mortality rate than some "backward" countries?

Why don't our people live very long when compared to Europeans?

Why are the Japanese kicking the stuffing out of us in the production of not just cars, but televisions and steel?

On top of it all, why are we paying 6.5% of our Gross National Product to defend the world, when countries like Italy spend less than 2.1% and seem to be in much more volatile places?

That my son was asking these questions told me that PC Globe had helped put a whole world of information into a format that my child could understand. Here he was comparing intricate statistics that make up our GNPs and our jobs, and yet I have trouble getting him interested in just about anything. It was information well

organized and well represented that captured his interest and inspired his curiosity.

PC Globe represents another genre of product that show how computers can replace other media. It gives perfect examples of how computers can easily access data in ways that make it far superior to a book.

Again of course, PC Globe isn't perfect. I don't mind that PC Globe can tell you that Japan (a relatively tiny country) produces more cars than the U.S. but can't tell you why (I don't think a computerized version of the book "Iacocca" could either).

What I do want is a program that can give me access to information from a major level (the world map) down to a fairly microscopic one. For instance, PC Globe will tell you that Beijing is the capital of the People's Republic of China, but can't tell you the name of the hotels there, what you can see if you visit, or even what the climate is like during a certain time of the year. These are the things that I want to know that a book may be able to tell me (if I look through numerous tables or lists) but I should be able to obtain with little work. To PC Globe's defense, this kind of detail would take way too much disk space for conventional media. When CD technology becomes an industry standard, I believe PC Globe might be able to provide what I want.

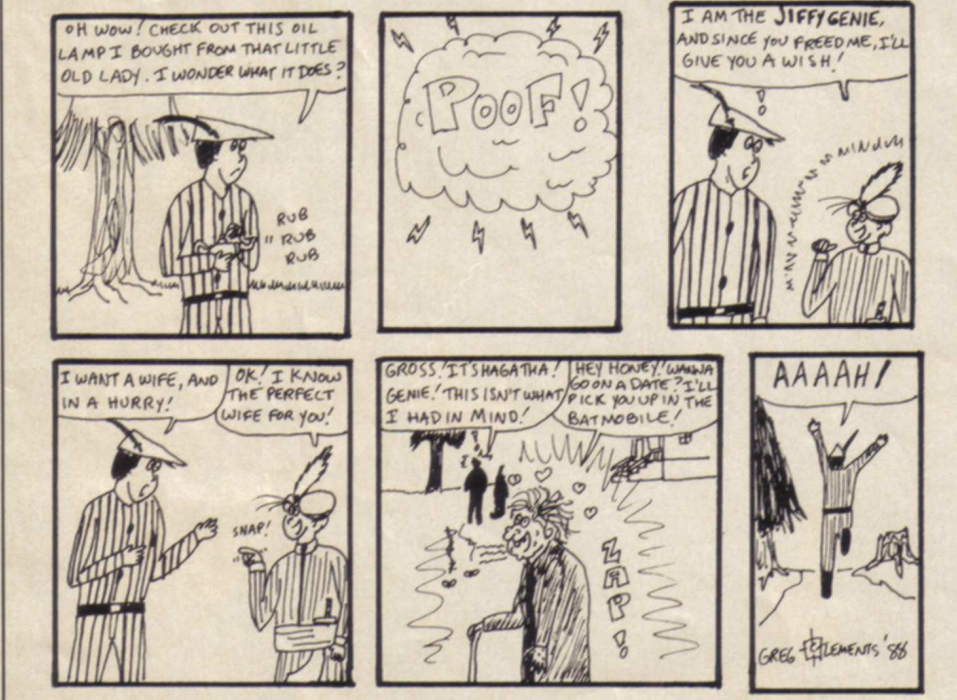
Like Prodigy, it only takes a few minutes with PC Globe to understand how it represents the future of reference media. The product can make a standard atlas virtually obsolete. It's a great example of how computers can improve the delivery of information, and package the information so that it can be more understandable, logical, and thought provoking.

About this time in my writing, I showed Roberta my article. True to the family style of not pulling any punches, her comment was "This is great stuff. So, with all these hot ideas you've got, how come we don't go out and chase those markets."

I consider this answer to be easy. Entertainment, be it television, music, or a good book, is in my mind the #1 reason to own a home computer. If you take a look at how much Americans spent on stereos, televisions, and VCRs last year, it easily outpaces how much they spent on more

Continued on page 23

Gary Clements, El Cajon, CA, submitted this winning cartoon about King's Quest II



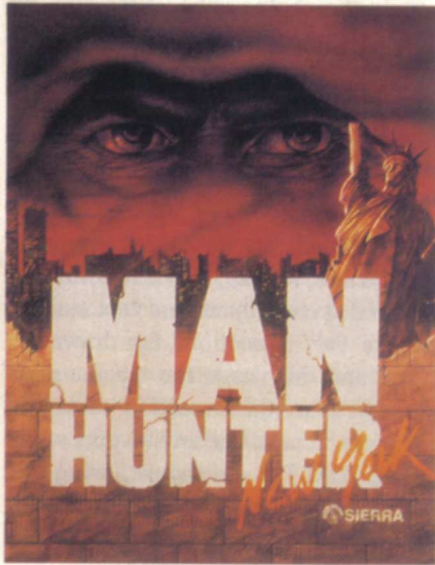
SIERRA ON-LINE WINS AWARDS

Sierra On-Line won top honors in five categories, including two major victories, at the 11th annual presentation of the Golden Oak Awards. All of the winning entries were produced in-house by Sierra's Creative Services Department.



Space Piston Comic Book

The Golden Oak Awards honor excellence in the advertising field in the Fresno area, which is one of the largest test marketing cities in the nation.



Manhunter poster

The winning entries were:

Best of Electronic Video: "Sierra On-Line Video Catalog 88"

Best of Print: "Manhunter Poster"

Publication: "Space Piston Comic Book," which is part of the *Space Quest II* package

Poster/Four Color: "Manhunter Poster"

Sales Promotion, A/V or Electronic Sales

Presentation: "Sierra On-Line Video Catalog 88"



Pictured left to right- Jodie, Paul, Sabine, Greg and John

The Creative Services Department consists of:

Greg Steffen, Director, Creative Services
 Sabine Duvall, Senior Graphics Designer
 John Shaw, Illustrator, Designer
 Jodie King, Typeset/Layout
 Paul DePledge, Video Producer

WE'LL PAY YOU \$5 TO PREVIEW SIERRA'S BESTSELLING LINE OF ENTERTAINMENT SOFTWARE!



Preview Sierra's bestselling line of Entertainment Software and we'll send you a \$10 rebate coupon (good towards the purchase of any Sierra software product). View actual full color game situations and listen to complete professionally composed stereo soundtracks (as played with a Roland MT-32 music card). Simply mail in this request coupon along with a modest shipping and handling charge of \$4.95 and you'll receive a VHS cassette of Sierra's bestselling line of Entertainment Software! Mail to Video Catalogue, P.O. Box 485, Coarsegold, CA 93614. Offer good in U.S. and Canada. No foreign shipments due to different video standards. Only one request per household, please.

ORDER FORM

Name _____
 Address _____
 City _____
 State _____ Zip Code _____
 Daytime Phone (____) _____
(Required for credit card orders)

Check/Money Order
(payable to Sierra On-Line, Inc.)

VISA MasterCard

American Express

Account Number _____
 Expiration Date _____
 Signature (required for credit card orders) _____

THIS OFFER EXPIRES SEPT. 1, 1989

The Making of *King's Quest IV*

The story of how a video animated adventure game is made.

The following article is reprinted from *The Official Book of King's Quest: Daventry and Beyond*, by Donald B. Trivette. Published by COMPUTE! Books.

King's Quest IV, like the other Quests in the saga, began as an idea in Roberta Williams' head. This time she wanted the main character to be a woman, so Princess Rosella, the sister of Gwydion from *King's Quest III*, was given the title role. Rosella's quest is to find a magic fruit that will restore her father, King Graham of *King's Quest I and II*, to health.

First Roberta outlines the story on scraps of paper and in notebooks, making changes freely as the plot thickens. Sometimes she consults her two children, D.J. and Chris, but husband Ken is little help; he's more interested in the technical details than the story line. As the story begins to gel, Roberta makes rough drawings of each scene, called "rooms" by the developers. For example, the original sketch of the



fisherman's shack, room 7, showed a boxy house with a line extending out to represent the pier.

Roberta also writes a description of each room; here's what she says about room 7:

A beach. Ocean to the west. Beach turning to green grass to the east. A fisherman's shack overlooks the ocean with maybe a little pier or something going into the water.

In addition to the drawing and the description, Roberta creates the script or story line that explains what goes on in each room. Although this gives away a few clues, here's what she says about the fisherman's shack:

1. You need to go to room 7 and enter the fisherman's house, room 42. There will be a fishing pole in there leaning against the wall. You want to get the fishing pole but to do that you need to buy it. The fisherman and his wife will take the pouch of diamonds in trade for the fishing pole. But, they will also take the golden ball. You don't want to give them that, though, because you need it for the frog. It's not



possible to give them the hen that lays the golden eggs because you can't get the hen until AFTER getting the unicorn.

2. Next, you can go into any of the beach rooms and "fish." Randomly you can catch a fish. Keep the fish with you. (Maybe you can only fish from the pier, for animation reasons.)

Of course some things change as the game develops. To conserve memory, it was decided that you could only fish from the end of the pier. And to avoid confusion, the fisherman and his wife will take nothing but diamonds in exchange for the fishing pole.

Setting the Stage

From Roberta's sketches and written material, the artists and programmers begin to construct the game using special programming tools developed by Sierra. View Editor is the program used to draw animated objects like Rosella and the fisherman. The central character, Rosella in this game, is always called "Ego" by the programmers and artists no matter what his or her gender in the program.

Picture Editor is the program used to construct and draw the background scenes like the fisherman's shack and pier. When the background artist got Roberta's sketch of the fisherman's shack, he first drew an outline of the building and pier. Next, he colored in large surfaces, then added tex-

tures and details like flowers, roof shingles, and wood grains. All King's Quest rooms use shade and shadow as well as perspective to give the illusion of three dimensions. In the photographs notice how the roofline slants to a vanishing point far to the right of the screen. Vanishing points are chosen to be high on the horizon to give the characters as much space as possible to walk; a low vanishing point would limit Ego's range.

Backgrounds are not stored as a completed picture; instead, they're constructed and stored as coordinates and vectors. Vectors give the instructions for drawing a picture, and they have the advantage of taking less space than would a bit image of a complete picture. The artist works with a standard IBM PC and mouse, using pull down menus and windows similar to many commercial CAD programs.

To maintain and enhance the three dimensional quality of the rooms, every object is constructed with a priority in relation to the other objects. There are 16 bands or areas in which things may be placed. Although the priority bands are invisible in the finished product, the artist must use them like a horizontal grid as he draws the room. Considerable effort and time is spent



placing houses, bushes, and trees so the player remains unaware of the room's mathematical rigidity. It wouldn't do for things to look like they were lined up on a checker board.

As the room nears completion the artist adds control lines that determine where Ego can walk. She shouldn't walk through a wall or tree, for example, but sometimes she does. If a tree is placed between two priority bands, Ego will walk right through it. The Sierra staff spends a lot of time running Ego all over the rooms looking for places where she falls off or walks through

something she shouldn't. Fixing an error may involve shifting a tree to a priority band or adding new features to a room to cover up a programming bug. In the fisherman's shack room, for example, a rope fence was added to keep Ego from falling off the pier onto the sandy beach.

Creating the Characters

Another artist is responsible for drawing the animated characters. Although the background are vector graphics (lines), the characters like Ego and the fisherman are made up of pixel drawings. The fisherman, for example, is created in a box about 33 squares high and 14 to 18 squares wide. By changing the colors of the squares, the character takes on different shapes, activities, and appears to move. The background color is special. This invisible-color takes on whatever color is behind it in the room. Thus, as Ego walks by a tree, you see brown bark surrounding her arm. The invisible color varies from room to room, but it's always a hue different from everything else in the room.

Animation is achieved by rapidly displaying several of these drawings or cells one after the other, similar to a flip book. It takes eight cells for the fisherman to take one step to the right, and eight more cells for one step to the left. A step up or a step down requires a cycle of six cells each. Thus, 38 separate drawings are required for the fisherman to walk. Because he sometimes carries a fishing pole, another 28 drawings are needed. He needs six cells to eat, six more to talk, and eight cells to get up off the pier. In all, the fisherman needs 76 drawings for his animation. Ego herself requires more than one thousand drawings to animate all her activities.

In all, the fisherman needs 76 drawings for his animation.

A room may take several days to draw, and then additional time is spent debugging and cleaning up. If the room takes too much memory (the average is about 12,000 to 14,000 bytes) it will load slowly and waste space. As part of the clean up, the artist looks for places to economize. The fisherman's shack takes 12,700 bytes and, as this is written, there is debate about the best way to draw the waves. Continuous

waves will take considerable memory, so when you get to this room you may find the roaring surf reduced to an occasional swell.

Sierra Creative Interpreter

The programmer is the one who puts all the rooms and animated characters together to make the game run. He does this using a special computer language called SCI (Sierra Creative Interpreter) developed by Sierra. SCI is an object-oriented language similar to LISP; it's written in Assembler, C, and itself. An older version of the interpreter, called Adventure Game Interpreter (AGI), was used to create *King's Quests I, II, and III* and the 256K version of *King's Quest IV*.

With SCI the programmer established classes of objects. The Actor Class, for example, includes anything that moves such as sea gulls, ogres, and Ego. The Props Class is composed of items that move but don't go anywhere—like a candle flame or smoke. The Views Class is



for things that don't require any animation, like the fisherman's fishing rod. The programmer writes scripts in the SCI language that define how the objects come together and interact with one another.

In room 7, a fairly simple room by *King's Quest IV* standards, there are six things to animate: smoke, sea gulls, waves, the door, the fisherman, and Ego.

A repeating cycle of four drawings gives the illusion of smoke coming from the fisherman's chimney. The word = 3 statement causes the smoke to move at one-third full speed. The instructions to make the smoke are:

```
animate.obj ( smoke);
ignore.horizon( smoke);
set.view( smoke, v.fish.cabin);
set.loop( smoke, 1);
position( smoke, 95, 16);
work = 3;
step.time( smoke, work);
cycle.time( smoke,work);
draw( smoke);
```

Opening and closing the door to the house is considerably more complicated.

This requires activating a five-drawing sequence which is triggered by the following code:

```
if (said( open, door)) [ must be close
enough
{if (posn( ego, 86, 120, 106, 133))
{if (!night)
{if ( door.open)
{print("The door is already open.)
else {set( game.control);
set.priority( ego, 11);
start.update( door);
end.of.loop( door, door.done); }}
else {print("You can't — it's lock
ed.))
else {set(notCloseEnough); }}
if (said( unlock, door)) [ must be close
enough
{if (posn( ego, 86, 120, 106, 133))
{if (!night)
{print("The door is already unlock
ed...))
else {print("You cant, it's locked. ))
else{set( notCloseEnough); }}
if ((said( knock, at, door) // [ must be
close enough
said( knock) //
said( knock, on, door) //
said( knock, door)))
{if (posn( ego, 86, 120, 106, 133))
{if (!night)
{print("You knock on the door...
a woman says... )
else {print "You knock on the...
a man calls out...}}
else (set( notCloseEnough);
}}
```

In English this says: If you try to unlock the door the program will say the door is already unlocked. If you knock on the door—the polite way to enter a home—the fisherman's wife will invite you in and you can open the door. At that point the program will begin the animation to open the door. If you're not within range of the door, the program will tell you that you're not near enough. If you should come to the house at night, a whole different set of instructions apply (the fisherman will say it's too late).

The sea gulls require a good bit of code to fly about in room 7. Their number (from 1 to 3) is randomly determined and their actions are governed by a built-in Wander function. The sea gull's bounds are limited by control lines and priorities. There's a control line just above the horizon, so the birds won't wander into the ground, and their priority is set to 0 so they will always appear to fly behind the house.

A function is a set of generic instructions that can be used over and over to do the same operation on different sets of data.

Continued on page 24

With SCI, Sierra's graphics, always a weak point on Sierra games, have been radically improved. Gone are the "blocky graphics" of the earlier games. They have been replaced by cleaner, smoother and better animated graphics done by talented artists. Technically, the resolution has only doubled on the games, but the pictures look more than just "twice as good." They have to be seen to be believed.

Sierra has also done a much better job of making use of the point-and-click nature of the Atari ST, and has used the massive memory of the 1040ST to keep more of the game in memory at any given time (less disk access). The feel of the new games makes not just earlier Sierra games, but most Atari products seem poor in comparison.

A major part of the Atari ST audience is also very interested in MIDI output, and has asked not just Sierra, but many other publishers why they don't make use of it. In SCI games, Sierra now offers support to various CASIO and ROLAND music synthesizers. To exploit the output on the MIDI, they hired top flight, professional composers to do game music like Bob Seibenberg (of Supertramp) and William Goldstein (Composer of FAME, currently with Disney's Touchtone Films).

A final feature of the SCI interpreter for the ST that users will come to appreciate is that Sierra ships its improved products much faster than it used to. Usually, Atari ST owners have to wait months to get a product written for their machine because

the software publishers don't feel an incentive to get ST games out on time (it's still a small games market for major game publishers). With the new SCI system, ST versions of Sierra products will be available for most other machines, including the Amiga and the Apple IIGS.

Recently Atari ST programmer Cory Cole had the Atari ST version of *Space Quest III* in stores less than 10 days after the IBM version of the product hit the stores, despite the fact that the IBM programmers had been working on the game months before he began his work. Can it be long before Sierra ships an Atari game FIRST????!!

Sierra's games written in SCI for the Atari ST include: *Space Quest III*, *King's Quest IV*, *Police Quest II*, new *Silpheed* and *Leisure Suit Larry goes Looking for Love in Several Wrong Places*. If you haven't checked out any of these games, you don't know what you've been missing.

SIERRA RESOLVES ISSUE ON DISK FORMATS

OFFERS CUSTOMERS BOTH SINGLE AND DUAL SIDED DISK PRODUCTS.

In the beginning, when only the Atari 520ST was offered in the U.S. market, all Atari STs featured a single-sided 3.5" drive. It was a simple decision for software publishers that they should ship all of their products in the 720K format. Now, just a few years later, Atari 520ST sales are a small part of the ST market, and software

publishers are eager to make use of the higher capacity of drives installed in the numerous 1040 MegaSTs in the U.S. Not only would taking advantage of these 1.44 Meg drives mean that publishers could put fewer disks in each package (which would reduce the cost of each software package) but would also eliminate the common ST user complaint of having to "switch disks" so often during a game.

The down side of this is that if the publisher shipped his data on disks written on both sides, single sided disk users would have no use for the publishers software. (Did you follow that?) How do you walk away from the roughly 15% of the Atari audience that only owns single sided disk drives?

In order to give dual sided Atari ST disk drive owners the added service they deserve, and still provide software that single-sided disk owners can use, Sierra has decided to provide its SCI line of products in both single and dual sided format. Both disk formats will be packaged and offered to retailers (who will make the ultimate decision on which format to stock). The single-sided version, which will contain roughly twice as many disks as the dual sided, will carry a retail price of \$10 more at retail. For instance, in a product like *King's Quest IV*, the \$10 will help to offset the cost of the four extra 3.5" disks necessary for the single sided version. ■

MACINTOSH

SIERRA'S NEW SILPHEED IS AN AUDIO/VISUAL EXPERIENCE

TWO DISKS FULL OF GAME AND TWO MORE FULL OF DIGITIZED MUSIC!

Owners of the Macintosh and Macintosh II have high standards for their game products. Products must take advantage of the superior resolution of the machine, the mouse must be addressed, and the sound capabilities of the machine must be exploited. For Mac II owners, color is also a must have, and hard disk installation is not just desired, but mandatory.

Sierra, in connection with Game Arts of Japan, has a new product that meets these demands in a way that Mac owners haven't seen before, but that they are gonna love.

Silpheed, a hot new arcade action game imported from Japan, addresses the Macintosh owners checklist for what it takes to make a good game. *Silpheed's* graphics and animation are crisp, smooth and quick. The game plays well by keyboard or the mouse. The Mac's music capabilities, which have been used in other games but never exploited to their fullest, are put through their paces by the sixteen digitized songs that make up the *Silpheed* soundtrack. For Mac II owners, the addi-

tion of color makes *Silpheed* truly stand out—the game screen looks just like something out of the arcades. Of course all owners of hard drives will be able to install *Silpheed* and set aside their floppies.

Silpheed is the first of a new line of Sierra games that will show a new commitment to the Macintosh market. Unlike other Sierra games that have been accused of being "simple rollovers" from less sophisticated machines, *Silpheed* shows the kind of effort that Mac owners can expect from Sierra in the future, when SCI for Macintosh is completed.

Currently, *Silpheed* is expected to ship the last week on April for Macintosh com-

puters. If you don't see it on the shelves, ask your dealer.

NEW 3-D HELICOPTER SIMULATOR FOR MAC

LETS MAC PILOTS DO BATTLE OVER THE TELEPHONE LINES

Most Mac owners own Modems and use them. Unlike MS-DOS users, who buy modems and then let them gather dust, Macintosh owners tend to tie up the phone lines contacting on-line services and bulletin boards. The time is right for a quality entertainment product that lets Mac users

play together over the phone lines, and Sierra has the product. New *3-D Helicopter Simulator* for the Macintosh from Sierra sets its sights on Modem owning Mac owners, with a new "connectivity" feature that lets you install the game, call your friend, and blast his helicopter out of the air in helicopter battles in a number of simulated cities.

Mac programmer John Hardin, creator of Macintosh *Helicopter Simulator*, has designed a number of playing fields for Macintosh pilots to master including some that demand two pilot attack missions

(Capture the Flag for instance) and others where precision, synchronized for two helicopters, will be the challenge. His favorite (and the favorite of most around the office) seems to be the battle scenarios over the phone lines. The more non-violent types in the office look at the product as a flight simulator and admire the product for its realistic controls and handling.

3-D Helicopter Simulator is scheduled for shipment in early May. Look for it at your local retailer. ■

AMIGA

SIERRA MOVES SCI TO THE COMMODORE AMIGA

NEW GRAPHICS AND MUSIC BRING LEISURE SUIT LARRY TO LIFE

No single animated character has had the reception or the impact of *Leisure Suit Larry*. Larry is loved by owners of all major home microcomputers, from the Tandy Color Computer to the Macintosh II, but Commodore Amiga people opened their hearts to him in a special way. Despite his many failings, including low resolution world and his somewhat blocky

animated body, *Leisure Suit Larry* was an Amiga best seller.

Now, Sierra has moved its SCI programming platform to the Amiga, and will soon launch Larry into his next adventure in a new and improved format. Amiga owners can look for the new Larry II, and all future Sierra Amiga games, to have a cleaner, improved look. Gone are the blocky graphics, the jerky animation and the limited music of early Sierra Amiga products.

SCI, Sierra's Creative Interpreter, is the basis for a whole new line of Sierra

products to include *Leisure Suit Larry goes Looking for Love in all the Wrong Places*, *Police Quest II*, *King's Quest IV*, *Space Quest III* and other future releases. Its ability to deliver complex graphics and animation and stereo music to the user, while processing a heavy amount of data in the background makes it a "secret weapon" for Sierra's game developers.

Sierra SCI products will debut in May, with both *Larry II* and *Space Quest III* due before the end of the month. Look for them at your local retailer. ■

President's Column, continued from page 18

"productive" home goods like refrigerators, washing machines and microwave ovens. If people will pay \$400 for a TV to watch "Laverne and Shirley" reruns, I can easily see them paying for a computer to play computer games and do their home finances.

Just as PC Globe represents a genre that will eventually usurp reference books, and Prodigy shows the future of the computerized magazine/newspaper, I believe that Sierra games represent the next generation of home entertainment. Just as those two products add an interactive dimension to their respective fields, Sierra games add interactivity to what has always been a "passive" media.

If you're reading this letter, chances are extremely good that you know how a Sierra game currently works, so I won't bother to explain our games any further. Like those other products though, I can name a

thousand ways that our games can be better, and I know that as computers get more powerful and allow us to do more, I will try to implement all thousand of those ways (and think up a thousand more). The exciting thing for me is that I can see all of the things I need (and Prodigy and PC Globe needs) to make my products better coming. Computer graphics capabilities are getting better all the time, and are fast reaching a spot where they will rival television. Music capabilities to rival stereo are a reality in computers today, and voice output and recognition capabilities will be trivial once we have storage media large enough to hold the data for it. As memory and processors get faster and more powerful, and storage media gets more sophisticated, the degree of interactivity we can have with movie quality images will also increase.

The technology needed to make home computers the ultimate home entertain-

ment is already available, it's just much too expensive. As this technology is packaged for delivery to homes, and as it gains acceptance, you can expect Sierra to support it.

At Sierra, our goal is to try to be a driving force in this new multi-media interactive entertainment industry. I work hard to make sure that we deliver on that goal. I'm glad to see that other companies (like Sears and IBM) are working to bring other forms of home information and communication to the home as well. We've got some great ideas, but we need more powerful hardware to implement them. I see this hardware coming, so I'm excited about the future.

I just wish it would hurry up and get here. ■

TO PLACE AN ORDER
1-800-344-7448

The BASIC language, for example, has a square root function that calculates the square root of a number; spreadsheets have an average function to find the average of a column of numbers; and SCI has many functions to speed up programming, including Wander, Chase, and Moveto.

Chase is a tricky bit of programming; it takes a lot of instructions to assure that Ego gets chased properly. At all times the Chase function knows her coordinates as well as those of the chaser. When Ego moves around a rock or tree, the Chase function must compute a path for the chaser—perhaps an Ogre or Wizard—to follow.

If Ego gets caught, there is no Death function to kick in and automatically take care of the details. Each death scene gets individual animation and attention; there's no standard way for her to die. Incidentally, Ego can't die in room 7 (there's no animation for that to happen); if she falls into the water, she will automatically swim.

There is animation in room 7 in case she falls off the pier. In fact, there are several

Chase is a tricky bit of programming; it takes a lot of instructions to assure that Rosella gets chased properly. At all times the Chase function knows her coordinates as well as those of the chaser. When Rosella moves around a rock or tree, the Chase function must compute a path for the chaser—perhaps an Ogre or Wizard—to follow.

scripts for that event. One if she falls off the north side, and another if she falls off the south side. If she falls south, for example, that triggers instructions called EgoShortFall and EgoShortSplash. A similar code provides for a fall to the north, but without the splash loop since a splash would be hidden by the pier.

There is no script if Ego should happen to fall off the pier onto the beach, so the artists added the rope fence to prevent that from happening. Think how silly she would look splashing around on dry land.

Ego can also fall on the rocks—called the fallRocks Script; this triggers an EgoStunned routine for three seconds.

Control is taken away from the user as the fall begins and is returned when the fall sequence is complete. In other words, you can't use the joystick or keyboard while Ego is falling or stunned.

Room 7 is an average *King's Quest IV* room, yet it takes more than 600 lines of instructions to describe how things happen there. A programmer spent two days writing room 7 code, and the cleanup programmer spent more time improving and correcting the code. *King's Quest IV* distinguishes between day and night, so there are about 30 rooms that have moonlight versions of the daylight rooms. The entire *King's Quest IV* game contains more than 140 rooms and tens of thousands of lines of instructions.

Music

Although *King's Quest I-III* have music and sound effects, the quality of the music hadn't kept pace with the improvements in graphics and animation. Roberta was determined to change that, so in addition to artists and programmers, *King's Quest IV* also had the talents of a professional musician. Once the game was playable, a tour of the quest was recorded on video tape and sent to William Goldstein for musical scoring.

Goldstein has several Hollywood films to his credit including Touchstone's recent *Hello Again*, as well as the television version of *Fame*, for which he received an Emmy nomination. His electronic music compositions include *Ocean Scape* on the CBS label and *Switched on Classics* for the Proarte label.

For *King's Quest IV* Goldstein chose to work with a Roland MT-32 synthesizer, which is actually eight synthesizers in one. With its capability to simulate 32 voices or instruments at the same time, the Roland MT-32 is like having a small orchestra in your computer. The stereo synthesizer can add rich and subtle ambiances to a musical composition. Goldstein used a slight echo in each of the interior rooms, for example, to give an illusion of depth and space.

There are more than 75 pieces of music in *King's Quest IV*, which is more than in a

feature-length film. The compositions include a sinister wedding march, organ music, Middle Eastern music to charm a cobra, and five selections for a wandering minstrel, who plays so badly that you'll laugh at his rendition of Greensleeves. There's an elaborate eight and a half-minute piece to accompany the animated introduction where the old King is taken ill and Rosella learns of her quest. This is mood music to set the tone and emotion for *King's Quest IV*. In addition, each of the 35 characters in the game has his or her own theme songs.

Although room 7 doesn't have any music, the fisherman has an introductory tune when he meets Rosella on the end of

There are more than 75 pieces of music in *King's Quest IV*, which is more than in a feature-length film.

the pier. Roberta Williams suggested several adjectives that describe the fisherman's character: "old, sea salt, poor, despairing" and Goldstein composed a suitably salty eight-second chanty.

To get the full stereophonic, orchestral effect of the music, you'll have to install an optional music card in your computer. For IBM computers, *King's Quest IV* supports three cards: the AdLib music card, the IBM music card, and the Roland MT-32. They range in price from \$245 to \$600. The music cards must be connected to the amplifier and the speakers in your existing stereo system.

For computers without enhanced music capabilities, Goldstein's soundtrack was distilled into a form that uses the limited capability of the standard IBM PC. The Apple and Tandy versions of *King's Quest IV* have better sound than the standard IBM version, because those machines have better sound hardware.

The striking composition of William Goldstein and the "live-performance" sound of a music card contribute a new dimension to *King's Quest IV*. You've got to hear it to appreciate how much of a difference professional music makes in a computer game.

Mark: Right. Mark is able to take preset voices and manipulate them somehow to make them sound like anything he wants.

Scott: One of things he is doing now is actually loading sound effects into the MT-32. He is changing some of the ways the voices are set and is customizing them for the game. In fact it is taking 45 extra seconds just to load the game now. You can notice the light on the MT 32 flashing at the beginning for a long time while sounds are loading.

Mark: Not to brag, but it seems like everyone at Sierra who has played the game is inspired to come up with new things, like the sounds, for instance. Scott and I have come up with a lot of strange ideas and effects that have caused the inter-

Scott: Then he brings it in and we listen to it and we go "Yeah, that sounds good" or we go "Ummmm." He is real easy to get along with. Mark was the first who didn't really like something. He was a bit nervous...

Mark: I was a little nervous to tell someone of his musical stature...

Scott:...he has sold millions of albums...

Mark:... that it wasn't quite right.

Scott: But he turned out to be really open to suggestion, and had no ego that we could see. It has been very interesting. We've enjoyed it.

Mark: We've been very open-minded, too, as players of the game will see when they hear a completely different Space

things to ask as you go along and the response surprises you, or do you know what it is going to say.

Scott: I surprise me because sometimes I'll put things in late at night and I'll forget about them. It will be some really obscure thing and I won't see it for nine months and all of a sudden I'll be showing some people the game and they'll give me a question to type in and I'll do it but I'll think I didn't put anything in for that, and then there comes some response. Sometimes they're embarrassing and sometimes they are not.

I've wondered if you have any favorite bugs. Do you ever want to leave some bugs in the game?

Mark: Oh, I don't think bugs per se. But we like to slip little secret things in that

Daniel Wellman, River Forest, Illinois, submitted this winning cartoon about Space Quest I



preter to change because the system programmers were inspired to make the interpreter do more. They enjoyed it, too, and those changes inspired us as well.

Scott: There are some changes the system programmers think might be stupid, or that the return would be so small why bother, but when they are playing the game they get pretty psyched up—they get like little kids sometimes. It gets them going, and it has helped us get some new things out of them. It gets us going too.

The game not only has the sound effects, but for music you have a collaborator.

Mark: Right. Bob Siebenberg of the rock group Supertramp.

How does that collaboration work?

Mark: Very well. We just give him a video tape of the scene, not unlike what a movie score writer would do. And he takes the moods that we want to come across and writes music for that particular scene.

Quest theme song that has really caught on and you can hear people whistling it and humming it around the building. It's a catchy tune.

Scott: The original theme was actually Mark's composition and Bob has taken the original theme and worked with it and changed it. So Mark gets some credit there also because that thing has held on quite well.

Do you enjoy playing your games after they are finished?

Scott: Welllllll.

Mark: For me they are the only ones I enjoy playing. I don't really care for the dungeons and dragons type thing myself, I'm more into the space thing, as Scott is, and I think we try to create a game that we would enjoy playing. That's our goal. We are trying to please ourselves more than anyone else.

In these games a user can type in all sorts of questions and get a wide variety of responses. Do you ever think of new

most people probably would never find. Going back to my first project, *King's Quest II*, probably a lot of people saw the Batmobile peeling out of the cave. So we like to stick little things like that into the games.

Scott: Sometimes Roger Wilco gets stuck. We had one today where he was standing on his head and you could move him around. As a programmer I don't think I have any bugs I could call favorites. No bug is a good bug. We've had some interesting bugs though.

Do your families—parents and wives—enjoy playing computer games? Do they understand what you are about?

(They both laughed again.)

Scott: Well my wife does sort of but she's a little mystified by it. She enjoys the adventure game; she likes mysteries and so it's a natural for her. As far as them understanding what we do or trying to explain it to anybody else—Mom, Dad, sisters, in-laws—they just say "Well, I'm glad for

you, and then they start talking about the weather.

Mark: Ditto. In fact, they ask me for copies because their nephew has got a Nintendo and he just loves to play it. (Here he snickered.)

What advice would you have for readers longing to get into programming and computer graphics?

They both laughed and Mark said "Don't do it."

"If you can tell a good story and you like hard work...."

Mark: Just kidding. You've got to realize we are at the end of a project. We've spent the last thirteen months thinking about this. There is a lot more involved than most people think. We get letters every day from people with ideas for games. It's not that simple. There is a lot of thinking that goes into these things.

Scott: Not to mention being able to endure the whole process of creating the game and then finding that happy medium where you can entertain an 8-year-old and a 30 or 40-year-old. You have to have different things to entertain—have something in there for the adult that is not too childish and for the kid that is not too adult.

There are so many things that you just can't imagine that you have to deal with when you create one of these games. You just have to be prepared.

If you can tell a good story and you like hard work....

Is the technology keeping up? Does it frustrate you that you cannot do some things you want to do?

Scott: Things are going good, in my opinion, except for data storage. Disk drives are still way too slow. And we are still dealing with 360K floppies when you could have 1.4 meg 3-1/2" floppies. That's where I'm frustrated.

We are getting better colors, we're getting more resolution, we're getting a little more memory to work with. But it seems like the disk drive is still the ultimate problem right now. Sending out a game with eight disks in it...that's ridiculous.

Mark: My goal is to see the entire screen animated. I want to see everything move. And of course that is just not practical. So it is frustrating for me to do these little bits of animation here and there.

Scott: That's true. I'd like to see a higher percentage of the screen animated without having it move at a snail's pace.

Do you have your next game in mind yet?

(Here they both laughed again.)

Scott: People in upper management have been asking that every day. Actually, they have been working to split us because they feel like if they split us into two teams they can get twice as many products. I

Cyril Chong, Hong Kong, submitted this winning cartoon



think that's on their minds now. They have Mark lined up for a separate project, and I don't know exactly what I'm going to be doing. I have a couple of ideas but I haven't had a chance to talk with anybody official yet because of this project.

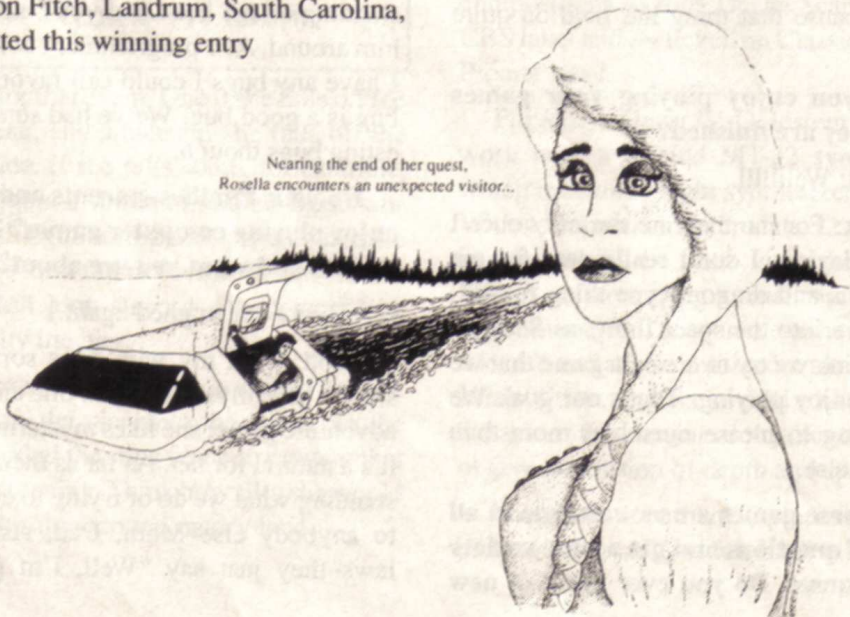
Mark: The next project I'm on is a horror game and there's going to be a lot of gruesome blood and guts. It's not going to be your kiddy game—I guess R rated is the term I would use—it's going to be scary. It's going to be a challenge trying to make a game on a computer that scares you. That's my goal. ■

SIERRAGRAM WINNERS

- Ron Anastacio, Corpus Christi, TX
- Walter B. Carnes, Oerland, PA
- Barry Cooper, Elizabeth, NJ
- Charlie Gorton, Centereach, NY
- Mark Klein, Warren, MI
- Kyu Lee, Torrance, CA
- Andre Monserrat, Tallmadge, OH
- H. Richter, Vancouver, BC
- Dan Spitzley, Grosse Pointe Park, MI
- Hannah Warren, Covina, CA

Cameron Fitch, Landrum, South Carolina, submitted this winning entry

Nearing the end of her quest, Rosella encounters an unexpected visitor...



The answer to the last Sierragram was: "What is guarding magic fruit in King's Quest IV. Answer is pictured in this newsletter. Circle and mail to us." On page 25, Fall/Winter Newsletter, a picture of the cobra was hidden in the ad.



NEW SIERRA PICTURE CONTEST



A PICTURE IS WORTH 1000 100 62 WORDS!

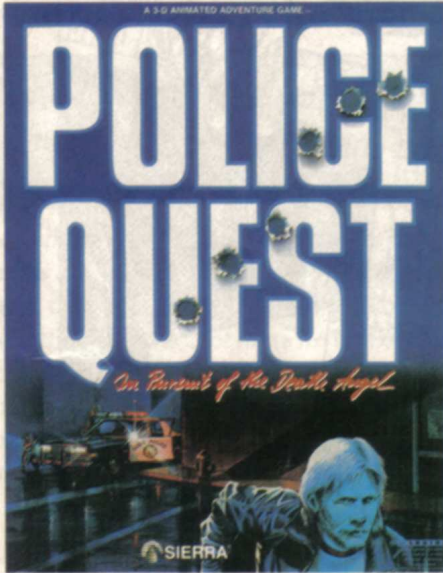
Roger Wilco is stalking through this trashy scene from *Space Quest III*, and you must help him find names, places, objects, etc. hidden amidst the debris! Look carefully.... These words are backward, forward, upside-down, sideways, or any other twisted way we could fit them in! There are 62 words in all from various Sierra games, and 25 of 'em are from the new *Space Quest III*. (Note: Compound words count as only one word, for example "CONEY ISLAND, BIG BELCHER.") Good luck!

Be one of ten lucky winners and receive a Sierra software product of your choice. Mail a numbered, alphabetical list of the names you found to Sierra On-Line, Box 1103, Oakhurst, CA 93644, Attention: Picture Contest. All entries must be postmarked before July 31, 1989; only one entry per household. Ten winners will be drawn randomly from the pool of correct entries. Winners are chosen at the sole discretion of Sierra On-Line. In the event you are a winner, be sure to include your name, address, phone number, choice of product, AND your type of computer.

OUR READERS RESPOND

"Police Quest has rad graphics. Sierra rules in software!!!! (I'm not exaggerating.)"

—M.P., Canberra, Canada



"I am a police officer and enjoyed the Star Wars movies. So you came out with *Space Quest* and *Police Quest*, and I loved them."

—D.P., Longview, Washington

"There is a growing contingent of police officers, district attorneys, lawyers and judges in Texas, who have become obsessed with your computer games, having played *Leisure Suit Larry* and the *Police Quest*, *Space Quest* and *King's Quest* series. We have even flown to Dallas in order to hunt down and buy the games."

—C.D., Amarillo, TX

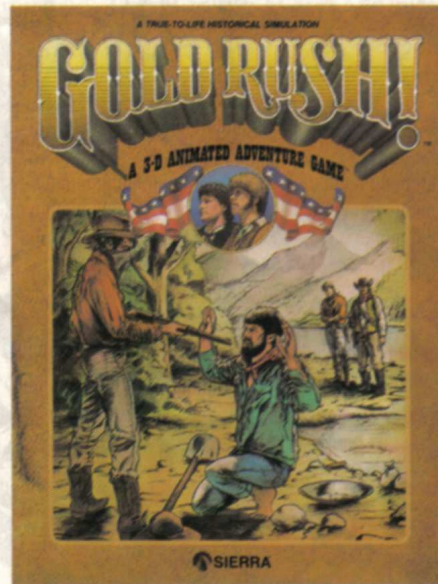
"Sierra games make me feel like I am the main character searching far and wide for that special answer or key."

—C.S., Monroe, NY

"For my birthday this week, I bought the family *Goldrush!* ...What a fantastic adventure, learning tool. We absolutely love it. Thank you so very much for blending history, animation, hacking and adventure into such an entertaining activity the whole family fights over.

I'm the only one that watches T.V. anymore because I just refuse to elbow, bite, kick and scratch my way up to the keyboard."

—G.S., Redding, CA

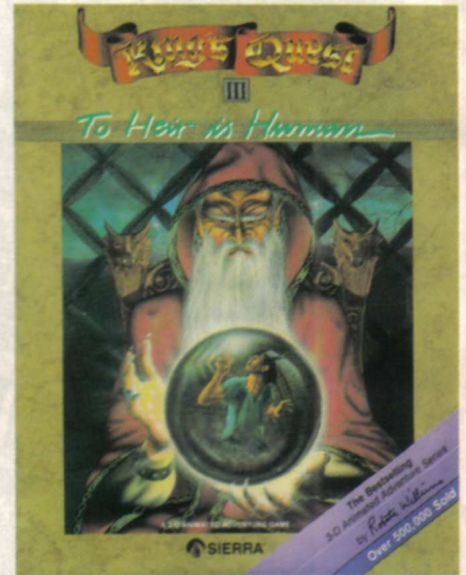


"I will always be Mrs. Williams' fan and whatever she does, I'll buy and savor." —J.E.

To Roberta Williams

"...Do you really want your face flashed on the screen every time Rosella dies? I found my daughter (and me, too!) snarling at you, 'But we *were* careful, Roberta!'"

—J.K., Newington, CT



"I am a great King Graham fan. I've been with him through it all, and I think he's great. We're buds, ya know. So what are you doin' now? I just read your latest newsletter, and for *King's Quest IV*, King Graham is ... He's ... I can't say it, but you know, "not well." Graham's a stud! He can't die! WHAT ARE YOU DOING HERE?! This could do serious things to my mental condition."

—A. B., Bellingham, WA

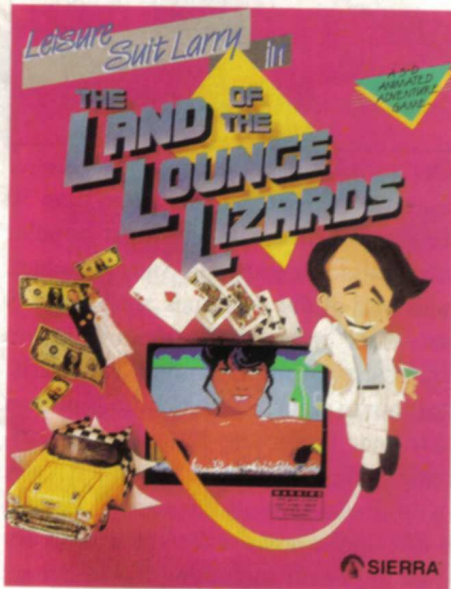
"P.S. If you are not planning to bring Graham back in any other adventures, please bid him a fond farewell for me. Thanks."



"I thought I was cured from computer games...and now you come out with a new game in every one of the series I played. I have only one thing to say:

**SEND THEM ALL, AND
SEND THEM FAST."**

—T.J., Oslo, Norway



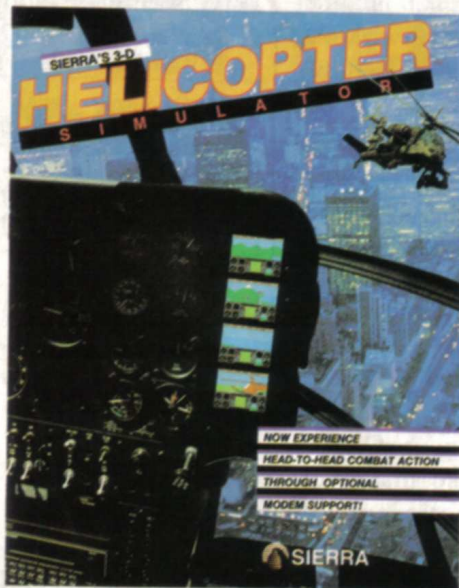
"Allow me to thank you and Sierra for your attention to my letter of complaint. I will not pretend that I was not angry. Then all the phone fun and I was fit to be tied.

But the service you and Liz rendered has convinced me that you guys cannot be all bad. Now, Kathy, if you can tell me how or what to do about the *Quest II*, we can all kiss and make up."

—E.L.S., Long Beach, CA

"...It's hard to stay mad at your organization if you are going to be so nice to me."

J.E.H., Augusta, GA



"I just love *Helicopter Simulator*. I play it all the time and I hope I will soon be good enough to play on the modem with someone else and beat them."

—N.T., Newport Beach, CA

"While I expected a friendly and courteous exchange of the program, what we got was far beyond my wildest dreams. In addition to exchanging the program, we were treated to a full tour of your operation.

During the tour I had a technical question about the disk formatting for the Apple IIGS disks, and was able to talk directly to a programmer who not only answered my question but gave me the reasoning behind the answer.

One of my favorite areas was the QA department. Trying to make programs bomb!

My dream job."

—J.&T.W., Fresno, CA

**TO PLACE AN ORDER
1-800-344-7448**

"I do not know if you get many orders from this part of the world, but your products are very well known and enjoyed by practically every home or office that has a P.C. computer. Sierra products sell like wild-fire here whenever they appear on the shelves.

No other game I have ever seen matches up to the standard your products set."

—E.G., Johannesburg, South Africa.



"I had a chance to visit your company in late August and I must say one big Thank You! From the time that we first walked in you were very friendly.

What a thrill and honor to meet the creators of the *Space Quest* series. They were working very hard but they still took time to talk to us and explain what they were doing as well as how they were doing it."

—B.P., San Gabriel, CA

Quality Control

Once the game is thought to be finished, it goes to the Sierra Quality Assurance Department along with the story line and the programmers' maps. One of the first things QA does is to extract from the software all the text and messages—things

You've got to hear it to appreciate how much of a difference professional music makes in a computer game.

like, YOU CAN'T DO THAT and ROSELLA SEES A BEAUTIFUL FAIRY....This results in a small book, which is then proofread for grammar, spelling, and punctuation by one of the five quality-assurance people.

The QA staff begins playing the game using the programmers' maps and notes. Even with this help, it takes at least two eight-hour days for them to complete the quest. The testers are looking for inconsistencies: places where Ego is visible through a tree, where she can't leave a room, where she is carrying the wrong object. Errors are reported to the programmers, who decide whether they are valid errors. In *King's Quest III*, for example, when the wizard demands a meal, Ego must leave the dining room and then

reenter in order for the wizard to sit at the table and eat. The QA people thought this was an error, the programmers said it wasn't. So if you put food on the table, but the Wiz won't sit down, try leaving and returning. The QA staff also makes esthetic suggestions. They felt the antlers in the

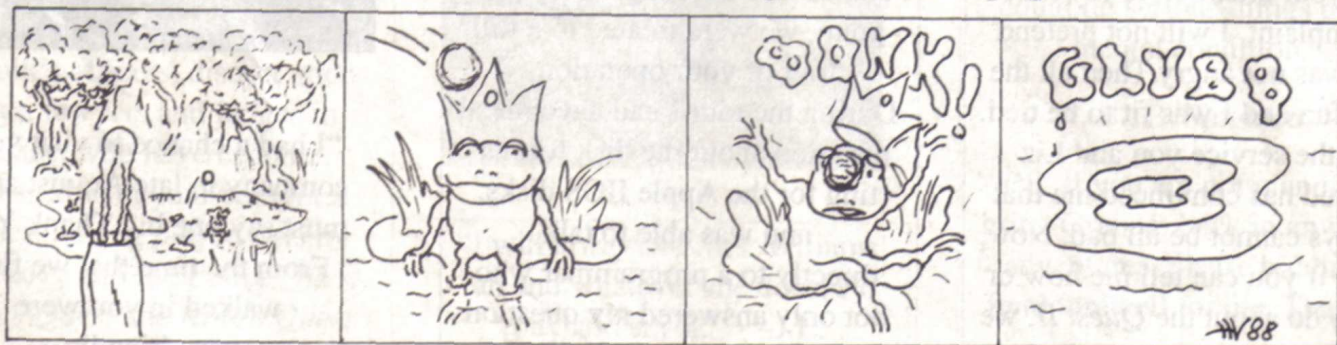
dining room in the Apple version of *King's Quest III* were the wrong color. The color was changed. Another color problem in the same game was not so easily resolved. There is a spider that gets carried out over the ocean and dropped into the water (if he doesn't get Ego first). The spider and the ocean were the same color. The QA people, the programmers, and the artists had a meeting to discuss the problem of the invisible spider. Unfortunately, all the alternate colors were also in use and just caused the spider to disappear somewhere else. This colorful matter was bucked to the top: Roberta decided the spider and the ocean would remain the same color and the

Tony Spencer, Everton Hills, Australia, submitted this winning cartoon about *King's Quest IV*.



spider's splash was enhanced. The Quality Assurance Department uses more than 30 different computers in the most popular configuration to test each Sierra product. About half of the machines are MS-DOS clones and compatibles, the others are Macintoshes, Apples, Amigas and Ataris. After four to eight weeks, hundreds of man and woman hours, and 20 to 30 error-correcting cycles, the product is deemed ready to ship. Even with all this careful testing, the QA staff knows a few of us will try something or do something the designers and testers did not anticipate. There are usually a small number of follow-up bugs to exterminate.... ■

Hannes Högni Vilhjálmsson of Reykjavik, Iceland submitted this winning cartoon about *King's Quest IV*



Order your own copy of "The Official Book of King's Quest"
by Donald B. Trivette, published by COMPUTE! Books.

Call the Sierra Order Desk at

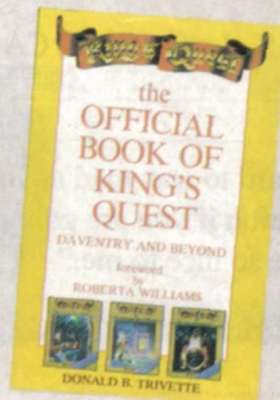
1-800-344-7448

Or send \$10.95 to:

Sierra On-Line, Box 485, Coarsegold, CA 93614, Attention: Sales

Shipping and handling are free for prepaid orders, or for charge orders \$5.00 in the U.S. and Canada, and \$10.00 elsewhere.

Look for "The Official Book of Leisure Suit Larry" coming soon from COMPUTE! Books.



377K-KUL

YOU'RE IN DEEP PLASMA THIS TIME, ROGER WILCO!



THERE MUST BE AN EASIER WAY TO MAKE A LIVING

There's never a moment's rest for galactic heroes, and when you're Roger Wilco, space-age swashbuckler and all-around nice guy, the thrills just keep on coming. It seems there's always some kind of dangerous mess to clean up.

This time it's those Two Guys from Andromeda, bestselling designers of Space Quest and Space Quest II, who have gone and gotten themselves foully abducted by the pesky pirates of Pestulon, those poaching parasites, those perverse perpetrators of petty mischief and putrid software.

If Roger can't rescue the two guys from the bowels of the Scumsoft Software stronghold, his days as a popular adventure game character are definitely numbered.

So it's simple, right? Just set course for Pestulon and storm the gates of Scumsoft.



Pilot your ship through the farthest reaches of space, using onboard computer to navigate between planets and defend yourself from enemy fighters.

NOT SO FAST, SPACEWIPE!

But the Two Guys don't write games for sissies. If you can't stomach being picked up like so much trash by a wandering garbage freighter, stalked by giant rubbish rats, ground into hamburger in the belly of the Mog, zapped by a scorpazoid in the deserts of Phleebhut, or deep-fried like a chimichanga on the planet Ortega, you'd better play one of those 'nice' games. In Space Quest III, *The Pirates of Pestulon*, you're not likely to be shown any mercy.

LIFE'S NOT EASY FOR HEROES

Real heroes thrive on danger, and space-faring broomjockey and freelance good-guy Roger Wilco is no exception. Is he afraid of being fried by lightning in a megathunderstorm? Is he afraid of landing in the trash shredder in the depths of the intergalactic garbage truck? Is he afraid of finishing the Belcher Combo plate at Monolith Burger? You bet your sweet asteroid!



Check out all the crazy and absurd junk, er, uh, treasures at Fester Blatz's wacky World of Wonders.

TRASH HEAPS OF PRAISE FOR OUR TWO GUYS

Game reviewers throughout the galaxy love Space Quest games: "...humorous and challenging...", "laugh-out-loud funny...", "genuinely entertaining...", "...A three dimensional graphic wonder..."



Battle for your life in the arena with the Nuke 'em-Duke 'em robots. He's down! He's up! This crowd is out for blood, and it might as well be yours.

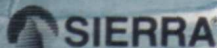
HAVE YOU GOT WHAT IT TAKES? NOW'S YOUR CHANCE TO FIND OUT

But don't take their word for it -- blast off for adventure, challenge, and laughs with Roger Wilco and the Two Guys from Andromeda in Space Quest III, *The Pirates of Pestulon*.



ORIGINAL MUSIC FROM SUPERTRAMP'S BOB SIEBENBERG

Space Quest III features the best and most realistic sound of any Space Quest game. The exciting original music score and the more than two dozen realistic sound effects must be heard to be believed.



FOR THE SOPHISTICATED AUDIOPHILE

GET BLOWN AWAY BY SIERRA'S NEW STEREO ENTERTAINMENT SOFTWARE!

You won't believe how exciting a Sierra game can *sound* until you hear it with the Roland MT-32 Sound Module. This state-of-the-art sound enhancement card will bring new dimensions of enjoyment to your games with full-stereo music and dozens of synchronized sound effects.

Sierra games now feature full stereo soundtracks professionally composed and performed musical soundtracks, featuring the talents of professionals such as Hollywood composer William Goldstein and Supertramp's Bob Siebenberg. The professional-quality Roland MT-32 Sound Module brings this music

to you as it was meant to be heard, with a 32-voice synthesizer and 128 preset sounds ranging from orchestrated strings to hard-driving drums.

Find out more about the Roland MT-32 Sound Module by ordering Sierra's free Music Demonstration cassette.

You won't believe your ears.

 **Roland**

Call Sierra and order your **FREE** Demo cassette today!

**1-800
344-7448**

OUTSIDE
USA
209
683-4468



The Roland MT-32 Sound Module with Roland MPU-IPC and Ease is \$550.00.

Sierra On-Line, Inc.
P.O. Box 485
Coarsegold, CA 93614

BULK RATE
U.S. POSTAGE
PAID
Coarsegold, Ca
Permit No. 16

New Hint Lines Open 24 Hours

Story on page 6

Meet the real "Two Guys from Andromeda"

Story on page 3

New *Silpheed* from Japan

Story on page 9

Pirated "Larry" poisons London's Wall Street

Story on page 13