

CompuClub

Where Atari owners belong.

SUBJECT: 520 ST

A COMPUTER PROFESSIONAL WRITES
ABOUT THE 520 ST VS THE AMIGA

to: Dr. Michael Mitchell
from: John DeMar

subj.; ST

I'm sure you are a sane, rational person, so I'll continue... I'm a software/hardware developer and an electronics engineer. I've seen and used computers from \$50 to \$5 million and have designed VLSI chips for 6 years at GE until starting my own business last year. So, the following is said from technical expertise and not first - impression judgements from marketing "fluff".

I own (or have owned) both the Atari 520ST and Amiga PC. I've given them both a good bit of work and inspection, including O/S design and hardware architecture. Here are some facts and my conclusion: The Amiga graphics IC's are very powerful in their own right and the sound I/O chip definitely gives nice synthesized music, but that is where the power stops dead. However, since people respond emotionally to sight and sound, the demos can easily catch someone's eye. Inside the Amiga there is very little true support for the power of a 68000 cpu

In the low res mode, those fantastic graphics chips steal almost 70% (yes!) of the possible CPU time that the 68000 could be using to do real computer things like calculate, move/sort data, and plot graphics on your screen. Since the complicated screen data for the Amiga must come from the same RAM on the same BUS as the CPU, there are excessive wait-cycles imposed on the 68000. This, together with the CPU speed that is 10% or more slower than the Atari 520ST, the Amiga does not come close to the true power and useful capabilities of the ST. Inside the ST, you will find MORE custom IC's than the Amiga and MORE powerful chips 'off the shelf' than the Amiga. This adds up to a real optimized, fast and versatile computer.

First, there are a pair of chips working together to optimize data BUS and screen data access. The memory controller fetches 16-bit data directly for the 68000 and also places screen data onto a separate BUS for the screen refresh chip. This operation only steals 8-18% of the available true CPU time. Further into the hardware, the 520 has three serial ports, RS-232, MIDI and keyboard. All off these are handled separately from the concern of the 68000 and all in hardware. The 520 has a 68901 interrupt controller that keeps track of 16 separate events in the system with very little intervention of the CPU this chip is really a necessity in a true 68000 architecture and is missing in the Amiga).

Now, the best feature and performer in the ST design is the custom disk DMA controller which transfers data to the RAM without using the CPU and does this at a rate of 1.3 megabytes per second! This IC also helps the Western Digital floppy controller and makes for the fastest microcomputer disk access that I have ever seen. The ST brings in a 32k file in less than 4 seconds, including drive start up, directory search, etc. The Amiga takes almost 20 seconds! Maybe you like to wait I don't. Not to mention the optimized setup that the DMA chip has for adding low-cost, fast peripherals like hard drives and CD roms

The Amiga uses a non standard disk configuration and does much of the disk support in software (ie slow). The drives have slightly more capacity than the ST's DS drives (880k to 720k) but this is at the expense of speed. the Amiga directory format (or lack of it) is done much like a Commodore-64. In fact, to get a directory, the Amiga goes out and finds a program called DIR, loads it and goes back searching!

Now that I have started into the topic of Software, I have more bad news for you. Intuition is graphically and colorwise more advanced than GEM or the MAC but fails to perform as a real user interface. the windows are poorly configured and move with flicker. I rate the MAC slightly higher than GEM in usefulness but GEM on the ST much faster and more predictable for the user

The Amiga OS is full of bugs and is clumsy to use after using GEM for 3 months. As far as real software goes, the ST already has many useful programs and there are more developers working on ST projects than Amiga.

As a programmer I found the 520ST documentation to be well written and complete. And if something was unclear, Atari was very open and helpful. On the other hand, the Amiga has a great deal of documentation but things change everyday. Worst of all, you have to be God or Electronic Arts to talk to anyone at Commodore. they simply are not professional people.

To finish off I would like to add a couple of bad things about the ST. the case could be nicer and they should have picked easier to find connectors for the monitor and drive ports. Besides that, I think (and over 50,000 others think) that the Atari 520ST is the most powerful and elegantly configured computer ever made. Also I feel that Atari will sell more computers than any other company has ever sold to date. This is not solely due to marketing hype (like the 64) but from true value and power that was never offered before. Save \$1000.00 and take a vacation next summer..... buy an ST.

Sincerely
John DeMar, QMI.

ALTERNATE REALITY

DATASOFT
CATALOG # DAT80D
LIST \$39.95 - CLUB \$29.95



As they say in the movies, A YEAR IN THE MAKING!

Alternate Reality is a dungeons and dragons type of graphic adventure offering some of the best graphics we have ever seen. If you like to match yourself against a program which offers the ultimate in graphics with a high level of challenge mixed in then this one is for you.

A short summary from the diary of the one brave traveler to the city of Xebec will give you an idea of what awaits you as you enter the City of Alternate Reality

Day three

I never believed in extraterrestrial life before this. But judging from what I've seen, there are myriads of inhabited planets in the universe. Earth isn't the only world that's been plundered by the strange ship that brought me here.

The night sky is most curious. Nothing looks familiar. There are stars, but none I recognize. I hear the same story from others. Perhaps we're in another Solar System altogether!

I found out quickly that it's not good to wander around alone after dark. There are many lifeforms whose intentions are unquestionably evil. Fortunately, I had enough money to check into an Inn.

DAY TEN

I picked up a cursed sword today and was in an awful state. I finally located the Thieves's Guild and. for a fee, they removed the curse.

One of the Guild members said my sword was very nice but I didn't seem to have much fighting knowledge. he recommended I get some training at a Weapons School.

As you can see the story is set far in the future and far away from here. What you will find here as you explore the 4 sides of the two data disks is more adventure and more puzzles than you found on any one of the Ultima disks and you will find it combined with the best graphics we have ever seen in a graphic adventure!

THE GOOD, THE BAD, THE UGLY

A quick review of HIPPO Software

Hippo Backgammon - Club \$29.95

This may well be the best of the hippo packages. Offering a sophisticated routine to analyze moves, this package actually plays a very respectable game. The graphics and playability of the package are super. Super use of color and a well thought out mouse interface make this game a real pleasure to play.

HippoSimple - Club \$37.45

Simply the worst database I have ever seen! This hostile poorly documented package seems to offer little in the way of reliability to offset many problems. In short, this product was rushed to market before it was ready to cash in on the lack of software during the first months of the ST's availability.

Hippo Spell - Club \$29.95

Unlike the HippoSimple package, Hippo Spell does work. It does not work well as a spelling checker but it does work. Let me explain what I mean by the above statement. In addition to the spell checking function Hippo spell will count each word you have used in the file it is checking and tell you the number to time each word is used. This function works well and is quite useful for those of you who are interested in the style of your writing. If only the spelling checker function worked as well this would be a good package. When I check the spelling in something I have written I want to see several things. First I want to see the word as it is spelled (it may be a proper name which would not, of course, be in the dictionary). Hippo Spell handles this function with no problem. Second I want to see how the word is used. Spelling mistakes are often typos in that case I may have no idea what the word should be when seen out of context. Unlike some of the better spelling packages (Regent Spell for instance), Hippo spell only shows the one suspect word out of context. Lastly the ability to add to and edit a user dictionary is quite important. Hippo will allow you to add to a user dictionary but (again unlike RegentSpell) it will not allow you to edit that dictionary.

Hippo ST Disk Utilities - Club \$37.45

A well done and useful package offering many handy utilities for editing either your disk or memory.

HippoArtI - Club \$29.95

31 Super drawings grouped onto 5 screens with a nifty loader to cycle through the picture with fades and dissolves from screen to screen. The pictures are all NEO compatible so you can use them or parts of them in your own work

H & D BASE

HOLMES & DUCKWORTH
CATALOG # HD504D
LIST \$99.95 - CLUB \$74.95

A relational database from Holmes & Duckworth

H & D Base is a relational database Management system developed by Chester Holmes and Oliver Duckworth (authors of H&D Forth for the ST, and The ST Took Kit. As a tool, it allows users to easily manipulate data through the use of straight forward, English-like commands.

ST owners who are familiar with the popular dBASEII program by Ashton tate will find H & D Base to be very similar. In fact, programs written for use with "dBASEII", when ported over to the Atari 520 will run without alteration.

With H & D Base it is possible to:

- *Create complete database systems
- *Easily add, delete, edit display and print data from a database, with a minimum of data duplication on file.
- *Gain a large measure of program/data independence, so that when a change of data is required, programs don't have to be changed (and vice-versa)
- *Generate reports from one or more databases, automatically do multiplication, division, subtotals, totals and other data manipulation every time they are used
- *Use the full-screen editing capability to set up a screen format so that you see exactly what you're going to get, and enter data by simply "filling in the blanks"

In short what we H & D is offering is a clone of one of the most powerful Database systems on the market. Before you order this package you should understand the fact that this program comes with its own programming language. And although it is quite simple to program (easier than basic by far) it still does require more effort on your part than would a simple non-relational database. In exchange for this added effort you will be given more power than any Atari owner has ever had over his database before.

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FORBIDDEN QUEST

PRYORITY SOFTWARE
CATALOG # PRY001
LIST \$39.95 - CLUB \$29.95

You awaken to the sound of the alarm klaxon sounding in the control room. You run in and find that the hull's integrity has been broken, air is leaking rapidly. Quickly you jump to action stopping the leak. Only then do you notice that your ship is about to crash land!

Forbidden Quest is a text adventure from Priority Software that takes full advantage of the GEM interface with drop down menus and mouse selection of items and directions. The screen is broken into two windows, one for commands and one for program responses.

After you die (which you will do fairly often when you first start) your mouse pointer will change from an arrow to a bony skeleton hand. All of the GEM functions work well with this program, the pointer/icon doesn't interfere with the text and all of the windows look well organized.

The parser is fairly extensive, although it is nowhere near Infocom, you can't say go through hatch or go into hatch, you have to give it a direction like North. The parser does take most words though and seems to work well with sentences.

If Infocom had this program's GEM arrangement or if this program had Infocom's parser then it would be the greatest text adventure available. As it stands the program is excellent and we recommend it to our text adventuring friends, it seems to be a fairly easy adventure so even beginners will enjoy it.

Also the program works in both color and monochrome so no one is left out in the cold. Enjoy it, it's great.

XMI 301 MODEMS

IN STOCK
 CATALOG # AT1301
 LIST \$49.95 - CLUB \$37.45

THE GOONIES

DATASOFT
 CATALOG # DAT56D
 LIST \$29.95 - CLUB \$22.45

The GOONIES

I will never betray my Goon Dock friends,
 We will stick together until the whole
 world ends,
 Through heaven and hell and nuclear war,
 Good pals like us will stick like tar,
 In the city or the country or the forest or
 the boonies,
 I am proudly declared one of the Goonies.

The GOONIES is a unique action-adventure game just released from Datasoft. If you have already seen the hit movie you already know the premise behind this game's object. It seems that a group of children are on a quest for treasure to save their homes from foreclosure. In the game, there are eight different Rube Goldberg style mazes that must be navigated by two of the goonies in order to get closer to achieving their goal.

I am very fond of the game play behind this one. In each of the screens you work with two goonies and must use them creatively and cooperatively to solve the challenge of the maze. The first maze is fairly easy to complete seeing that it has a very greedy Mama Fratelli that will chase after any freshly printed money. (hint hint). But you will find that none of the screens can be completed by just using one of the goonies, and selecting which goonie you want to control is just a simple button press away.

Should you be one of the people who find it very difficult to solve puzzling adventures, fear not! The GOONIES comes with a helpful hint sheet that will show you by picture and explain by poem how to complete any screen you are stuck on. The hint sheet will only help at discovering the secret of the screen, you must still be able to coordinate the goonies well enough to complete it yourselves.

Anyone fond of the movie will find each of the screens to be based on a scene of the Steven Spielberg film, plus the game has more than its share of killer bats, devilish flying skulls, and poisonous slime to make anyone happy. A difficult but not impossible game to complete.

Joe Aiello

ZORRO

DATASOFT
 CATALOG # DAT78D
 LIST \$29.95 - CLUB \$22.45

Based on the character created by Johnston McCulley, this action/strategy game lets you relive the exploits and adventures of the legendary Zorro in Los Angeles of the 1800's, as he attempts to rescue the fair maiden from the clutches of the evil Seargentt Garcia.

His quest takes him through 16 increasingly difficult screens of danger and excitement as he is chased by Garcia's soldiers. Some of the screens are in the catacombs beneath the Mission graveyard. Join the fun and excitement as Zorro leaps from rooftops, trampolines from floor to floor, and engages in duels with the soldiers of Garcia.

If you played and enjoyed the Datasoft game Bruce Lee you will be sure to like this one since it is a very similar game with a different background. If you didn't like poor old Bruce, you've been warned.

MASTER OF THE LAMPS

ACTIVISION
 CATALOG # ACT45D
 LIST \$24.95 - CLUB \$18.75

Master of the Lamps is a new color and sound based game from ACTIVISION. In this game you must help the young prince capture mischievous genies and put them in their proper place.

The king has died and genies have escaped from their lamps and are wreaking havoc across the kingdom. The prince must take his place on the throne, but in order to do so he must first prove his mental and physical capabilities to rule, by returning the genies to the lamps. In order to do that, we find the prince at the start of the game waiting for you to bring him to his magic carpet and guide him through a series of diamond shaped gates in space. The three dimensional graphics in this part of the game are very well done, you will find yourself leaning in, out, left, and right trying to give the carpet just a little more english as you guide the prince through the portals.

Having navigated your way through those diamonds, which, by the way, is not very easy after the first few levels, you appear in front of eight different colored gongs, each of which produces a different sound when struck. You may hit the gongs as often as you wish to hear what each sounds like before you summon a genie for a confrontation. You call a genie by striking any of the gongs three times in succession.

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PLUS, an excellent tutorial on ATARI disk structure & utilization to help you get started quickly and easily.

DISK MAGIC "XL" has been tested on most of the currently available disk drives for the ATARI system and will run without a translator on any ATARI computer that uses the 8 bit 6502 microprocessor. (Will not work with the 16 bit "ST" series computers.)

LIST PRICE: \$27.95

CLUB PRICE \$22.00

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BLACKMAGIC SOFTWARE

3720 Broadmoor

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The genie will appear in the upper left corner of your screen, open his magical book and produce from 2 to 8 musical notes which hang ominously at the top of the screen. As each note appears it makes a sound and is of a color which matches one of the gongs before you. You are expected to quickly memorize the color/sound of the notes and the order in which they came. This is the key to the game because after all the notes are displayed they turn pale grey in color and one by one start to fall on you.

You have time enough to try two, maybe three gongs before the note reaches you. Should the musical note get to you at the bottom of the screen, it will knock you unconscious and make you see stars, then you have to try that level again starting at the magic carpet. Hopefully, you correctly strike the gongs in the proper order dispelling the genie and collecting one of the seven pieces of a lamp which will hold the genie whilst you rule.

Master of the Lamps is not the most spectacular of the new games released for the Atari, but it does deserve a 'B+' for uniqueness and even will help develop color and sound discrimination in gamers of all ages. A child need not consider this game impossible, for it does have a simple practice level where nearly everyone will start at. This level features simple diamond portals to navigate through, plus when the genie sends the notes down upon you they retain their original colors making it fairly easy to match the gongs correctly.

Joe Aiello

COLONIAL CONQUEST

SSI

CATALOG # SS179D

LIST \$39.95 - CLUB \$29.95

Many people who do not really care for military strategy simulations will find relief with Colonial Conquest. The player(s) will find they are head of state of one of the major countries in either the late 19th, or early 20th, century. That was of course a time of rapid expansion for many of the major powers. COLONIAL CONQUEST offers you a vehicle by which you can relive this fascinating period.

The object of the program is for up to five players to compete for world dominance at the turn of the century. Achieving world domination is no easy task. However, many different factors and options are available to aid you in your drive to succeed. A strong mind and determination coupled with a little luck will see you to your goal.

The program is very playable and is challenging. There are three scenarios to choose from; standard game, 1880, or 1914. I chose the standard game to review and found that although merry old England achieved world domination in the real world the tables were quickly turned when I applied my skills to directing her fortunes. With five countries to choose from, and multiple human players, Colonial Conquest should provide many hours of challenge to most anyone interested this type of scenario.

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ELECTRONIC ARTS
CATALOG # ICS01D
LIST 49.95 - CLUB \$37.45

Back in the dark ages (over a year ago) there was a product on the market called Movie Maker. This program was able (with the help of a mildly skilled user) to produce some incredible animated graphic sequences. About 11 months ago it disappeared from store shelves. It's back and better than ever.

Where did it go? One of our least favorite companies ELECTRONIC ARTS purchased the rights to the package and set about enhancing it. This brought a long sigh for another good product gone to the great Commodore advertising firm for "enhancement". The last thing they enhanced was Realm of Impossibility and the biggest change anyone noticed was the "enhanced price".

Not so this time! The new MOVIE MAKER has been released and it's better than ever!

First and most important to many of us the documentation has been improved and simplified. Secondly the package now comes with a large supply of standard characters you can use in your movies, useful help screens and added features.

What all of this means is that a person with modest skills can now create a short fully animated cartoon on their computer. These cartoons can be strung together and run into a full feature. You simply select the characters you want to use from a library provided by ECA on an included disk, or create your own. Next, define the action and the background. Finally you select the music or sounds to accompany the movie. The program will help you put all this together and smooth out the action for you. This one is both fun and productive. You can use the finished product for hundreds of things.

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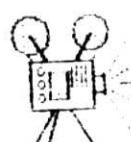
BECOME A HOLLYWOOD DIRECTOR!!

Put it in the can!

Its a wrap!

Someone get my sunglasses!

I'm off to the West Coast to sell this little Oscar winner!

**SILENT SERVICE**

MICROPROSE SOFTWARE
CATALOG # MCP56D
LIST \$39.95 - CLUB \$29.95



for all 8bit Atari's

You are the captain of submarine 104, will you risk yourself and your crew by attacking the enemy convoy in your scope? Will you attack submerged during the daylight, or wait for night to come to the surface to deal damage to the convoy with your deck gun? Are you prepared for the game of hide and seek with the destroyer escorts?

These are just some of the questions you must answer in the Silent Service simulation game by Micro Prose software. This game must be the most detailed and realistic simulations that has come out of any software company ever. You have selectable skill levels, and reality levels that allow you many options for the type of battles to be played. You are also given a time scaling option that allows you to speed up the rate of the game so that you spend more time actually playing, and less time doing time-consuming maneuvers that have to be done to stay alive in this simulation. All this and exciting graphics that show crucial battle stations like the bridge, periscope, damage control, the conning tower and many more.

Ready for battle you head out into the pacific to do damage to enemy tankers, troop transports, cargo ships, and if you can enemy destroyers who, ready for submarine attack, track you down and drop depth charges on your ship. But you are also ready. You start with a supply of torpedoes, and a deck gun that between both can send many enemy convoys to the bottom, using a realistic attack plotting system.

I would recommend this game for the experienced simulations gamer as well as the first time player. It has enough skill options to keep them both happy for a long time. Those of you that are familiar and liked F-15 Strike Eagle will also find that Silent Service is well worth putting in your game library. This game is now available for the 400, 800, xl, and xe series, but is due to be released in january for the 520SI....which will be a sight to see!

Review by Mark Dupont

INSIDE INFO?

INFO ON ST VS AMIGA
THINGS TO COME FOR ST OWNERS

Our thanks to both Current Notes and the RAM user group newsletters for the information in this column

The following are excerpts from an article which appeared in CURRENT NOTES, the newsletter of the Washington Area Atari Computer Enthusiasts. It is a report of the Oct. meeting attended by Neil Harris manager of Publications for Atari Corp.

Comments on Amiga

We (Atari) had an option to take that machine as one of our own and due to some interesting circumstances we made up our mind not to go with it... The Amiga was designed about 3 years ago, as far as the hardware part of it goes. It was designed to be, originally, a \$700.00 game console with no keyboard. When Atari engineers looked it over, they decided that, with today's technology, they could do better. So what we've done with the ST is we've optimized what we think is really the key features to a personal computer today. And, the key features are, we felt, fast CPU speed, fast I/O, and of course, low cost. Three are many (four) custom chips... They are not processors. They are support chips... They are sitting there to help the hardware of the system move things along... During half a cycle they are being used by the video and during the other half of the the cycle they are being used by the CPU so there are no wait states for the CPU to slow it down. For that reason, we've got a full 8 megahertz being pumped - 8.01 megahertz actually - out of the 68000 which is a lot more than they are getting out of the Amiga. Ideally in an Amiga, they're getting 7.16 megahertz. Practically, they're getting a lot less because the graphics chips and support-chips basically put the CPU to sleep during various operations they call a wait state.

MORE ST NEWS

There's somebody working, a couple of somebodies, on a PC emulator. I understand our engineers have started thinking about how that should work in case we want to do it ourselves. We are looking at a hardware approach and not a software approach which is the only way we see to get true, 100 percent compatibility...

I'm talking to the the SOURCE and sometime during the course of the next few weeks, I believe, we will be able to turn on the ATARI INFORMATION SERVICE on the source. There will be no sign-up fee, there will be the low SIG rates which are \$6.00 in the evening and \$10.00 an hour during the daytime. That is without any (doesn't include) surcharges for networking. We plan to have a great deal of text information and software downloads and a fairly good bulletin system up there as well. There are two expansion boxes coming from us, probably not till next year, for the ST. One is an eight slot box that let's you plug in eight devices to the ST at one time through the DMA port. That would be memory boards and all kinds of other goodies. And the second is a full 32 BIT COMPUTER in a box that will plug into the back of the ST. That will be a 32 bit processor running very quickly, even faster than the 68000 in the ST right now... It will use the ST's I/O it will use the ST's graphics, but it will give you a separate cruncher if you really need that kind of processing capability.

There's lots of things cooking in our laboratory. There is a lot of stuff that I really am not a liberty to talk about as far as what going on in the back rooms. But we had Phil Lemmons in, who's the editor in chief of BYTE... He just said to us, the world doesn't realize how far ahead of Apple we are as far as technology we've got sitting in our labs right now. There is going to be all kinds of goodies, basically, Atari is not a game company... Atari is a company that is dedicated to bring high technology, at a low cost, to consumers.

TINKA'S MAZES

MINDSCAPE SOFTWARE
CATALOG # MDS06D
LIST \$24.95 - CLUB \$18.75

Tinka's Mazes

From the SPROUT division of Mindscape Software
Ages 4 to 8.

Tinka's Mazes is an excellent application of computers in education today. The program takes a lively and fun approach to teaching young children basic mathematical concepts: practice in counting, strengthening addition skills, and even gets the child more involved with your home computer. Tinka Mazes can be set for several age levels

In levels one through three you have a choice of either guiding Tinka through a maze to school or just going to school direct. The maze, which can be bypassed, has its own educational benefits. Here the children can learn how to compare sets to see which contains more or less, or even do the clever addition problems presented within the maze.

Level 4:

This is the arcade/action portion of the disk. Here the child pilots Tinka through a maze collecting any school objects that she can and avoiding any of the mazers that try to trip her up.

The game is split into three grade levels;

1. Beginner features single digit addition, few animals (no Maze Meanies), and as much time as necessary to reach school.
2. Novice contains double digit addition, more animals, some maze meanies, and 14 minutes to reach school.
3. Advanced, three choices are presented. First the math problems;
 1. Hard (single digit addition problems)
 2. Harder (addition problems with one double digit number)
 3. Hardest (addition problems with two double digit numbers.

NOTE: As if doing the problems on paper, the double digit problems are answered from right to left.

This program is very well done, the animation is smooth, lively, entertaining, and downright cute! The parent company of Mindscape is SFN, America's #1 elementary and high school textbook publisher, and their hundred year experience in teaching certainly shows in this program. It has just the right mix of entertainment and will give the child the correct answer before he becomes frustrated and angry.

All in all I recommend this program for those who are looking for a quality program to introduce or back up a beginning math education.

Joe Aiello

1/2 MEG ST DRIVE

2 MOS. OLD

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CAVE GIRL CLAIR

RHIANNON SOFTWARE
CATALOG # RHI01D
LIST \$24.95 - CLUB \$18.75

It's not often that I get excited about recreational computer software. In truth, despite the fact I'm married to a man with a born again belief in the computer, the idea of "playing" with a computer is about as appealing as eating live caterpillars (more about that later). So there was amazement all around that:

- a) I asked to review this software series and,
- b) I really liked it.

Having heard the authors, Lucy Worth Ewell and Elizabeth Stott, on a morning interview show, I was intrigued by the fact that they had set out to "do something about the problem of girls and computers". According to these experts, most computer games rely more on strategies that generally appeal to boys than to girls. So although girls certainly have the same ability to deal with computers as their male counterparts, the average 7-13 year old girl is not going to be challenged by the same type of software as her brother. The authors selected the theme of basic survival for their series which features independent girls with realistic problems. The four titles in the series are:

1) "Jenny of the Prairie"

Catalog #RHI02D

is a pioneer girl who is separated from her wagon train and must face a winter alone in the wilderness.

2) "Chelsea of the SouthSea Islands"

Catalog #RHI03D

is a 19th century English girl and her pet kiwi who becomes stranded on a small Pacific island while traveling from New Zealand to boarding school in England.

3) "Lauren of the 25th Century"

Catalog # RHI04D

is an inhabitant of a desert outpost in northwestern Africa who is aided by her camel and pocket computer in her quest to join "The Order of the Sun".

4) "Cave Girl Clair"

Catalog # RHI01D

is a prehistoric cave dweller who has become separated from her tribe and together with her pet rabbit must survive until her tribe returns in autumn.

Space limitations prevent me from raving on about all four, so I've decided to use "Cave Girl Clair" as the focus of this review. But just to let you know how strongly I feel about their merit---my 8 year old neices Laura and Joanie are getting the quartet between them for Christmas.

O.K. lets get more specific about this program- There are two levels of difficulty based on whether or not the map of Clair's environment changes. Novices are obviously urged to start with level one. Unlike some other software series it does an excellent job of introducing the use of keyboard and documentation.

This software program comes packaged as part of a hard-cover text which contains an introductory chapter relating exactly how Clair came to be separated from her family. It also gives a carefully researched look at daily life in her tribe, including the aforementioned caterpillar snacks. A pullout reference card is included in the back of the text which allows the user to have easy access to the docs necessary for any adventure game.

Your goal is to help Clair survive by starting and tending a fire as well as foraging for supplies. If Clair survives until autumn, she will be reunited with her people and blessed by the Great Mother Spirit in a surprising feat of nature. Hopefully this text is only the first in a long series of adventures about Clair, or in a way that is well suited to them and I strongly recommend it to all parents of Girls 7-13 years old.

by
Linda Chester

You are a young karate master who must rescue your princess for the evil clutches of the Warlord Akuma. Armed with only your skills and your bravery, you fight you way through guards, falling gates, and even the Warlord's attack bird.

The graphics are animation quality, as is the movement. The screen scrolls without jump or flicker at impressive speeds. The color is super and the control over the young master in fantastic.

It even comes with it's own built-in movie in the form of the demo.

It is an all around great game and I enjoyed it greatly.

Reviewed by James Rhodes



INSTOCK

PLATO \$22.45
SUNDOG-ST \$37.45
TYPESETTER-ST \$29.95
KINGS QUEST II \$37.45
BRATACCAS \$37.45
ATARIWRITER+ \$37.45

CROSSWORD MAGIC

MINDSCAPE
CATALOG # MDS20D
LIST \$49.95 - CLUB \$37.45

Looking for the perfect program to offer a teacher to help with classroom work?

How about a really fun package for you to use to make crossword puzzles for you family?

Crossword magic, by Mindscape, was released for the Atari 8bit computers about 14 months ago. Shortly after that Electronic Arts bought it to improve it and re-release it for us lucky Atari owners. Well, Its been released again and what was already a good program has in fact been made better. Only its still being marketed by Mindscape. If you follow all of that then we would like to offer you a job buying Software for us!

All of the back room manipulations aside this is really a super program which will allow you to create truly professional crossword puzzles. The package guides through each step of what turns out to be a rather simple process. Type in the words you would like to have in your puzzle and the program will design the crossword puzzle fitting each word into the crossword matrix. You will then be asked what clue to offer for each word and the package will again handle this information automatically.

Once you have finished all of this you can tell crossword magic to print your finished crossword puzzle complete with a list of the "across and down clues".

Whether you are creating a Spanish quiz for your students or simply creating puzzles for your own enjoyment this is the best package of its type on the market.



BRODERBUND
CATALOG # BRO87D
LIST \$39.95 - CLUB \$29.95

The latest in the series of new games being released by BRODERBUND for Atari, Karateka has been out for Apple for some time now.

Karateka is a joy in both game play and graphics. The play starts out at a very slow place. As you become more at ease with the game, it becomes faster, until it is as if you are there.

ATARI AT COMDEX

A SHOW OF POWER

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By Jack Powell

Las Vegas, NV — COMDEX is the largest computer trade show in the US, and Atari and its third-party developers were easily the busiest attraction of the show. Atari was clearly aiming at a show of force in the 68000 world by gathering its supporters under a collection of plum-colored banners identifying each ST stalwart. Over forty software companies were provided display areas and ST machines by the Tramiel operation.

In the center of the Atari action, the the ST, the Amiga, and the Macintosh were lined up side by side. The familiar Amiga bouncing ball was running identically on both the Amiga and the ST, (actually, a bit faster on the ST), while the Macintosh displayed only a black and white disk icon bearing a question mark. The price tags over the machines told the story: \$1795 for the Amiga, \$2795 for the Mac, and \$999 for the Atari ST.

Not to be outdone, the 8-bit Atari 130XE was also displaying a bouncing ball demo. It was, however, the only Atari 8-bit machine on display at the Atari space. Except for the Amiga at the Atari exhibit, Commodore was not represented at the show.

ANTIC displayed its new ST catalog software, including the Metacomco Macro Assembler. Activision showed both Hacker and Borrowed Time. If you've seen Hacker on the 8-bit machine, you're in for a pleasant surprise. The travel through the underground tunnel is graphically real; complete with railroad lanterns hanging from the rock walls.

Sierra-On-Line has its Ultima II on the store shelves. We saw King's Quest II, the animated graphics adventure. On the ST the hero can move at three different speeds and the program can take advantage of two disk drives. Sierra-On-Line will also soon release Winnie the Pooh and ST-One-Write which, they say, is the number one small business accounting system for the Macintosh.

Academy Software had an ST version of Typing Tutor, and Xlent Software is showing The Typesetter — a Print Shop-style program.

In addition to its Regent Word word processor, Regent Software announced a spelling program named, logically enough, Regent Spell. Batteries Included was showing off the colorful graphics of DEGAS.

Spinnaker Software is introducing its line of graphics adventures and educational software. On their screen was PERRY MASON AND THE CASE OF THE MARDARIN MURDER.

Migraph is demonstrating EASY DRAW, an object-oriented graphics program. Among its many options is an "almost-infinite zoom."

TDI Software, is currently offering MODULA-2, a favorite language of computer scientists. They will also be demonstrating Andra, a professional typesetting program which was written on their own Modula

BMB Compuscience is demonstrating a database management package with LAN (Local Area Network) which will allow users to transfer data to and from the IBM and ST. They expect this to be available in March or April.

Mirage Concepts is also showing a Database in addition to their disk utility program by Holmes and Duckworth. And Portable Software is showing a property management system which operates under BOS (Business Operating System). This is going to be a high-end system for the vertical market.

According to Tramiel, hard disks are currently being shipped to developers and he expects them to be available to the end user by the first quarter of 1986.

Sig Hartman, President of Software at Atari, confirmed that Borland International, developers of the phenomenally successful Turbo Pascal, had just purchased three 520 ST's. "Borland is committed to write software on the ST," said Hartman.

Okidata is currently working with Atari to configure the software for its new OKIMATE-20 color printer for the ST.

The Okimate-20, which is scheduled for a late January release, can print 125 of the ST's 512 possible colors.

Not all the ST exhibitors were in the Atari area. Sublogic had its own large booth displaying FLIGHT SIMULATOR for the ST and other computers. The new simulator, with a planned release in the first quarter of 1986, and a tentative price of \$49.95, has many new features.

Michtron had several of their games and software utilities displayed. But the most impressive of their products was a new game called TIME BANDIT. This was a final beta with a planned release date in mid-December at \$49.95.

Time Bandit contains arcade action in a fantasy-roll-playing maze background. There are 20 adventuring areas with 15 levels each. The terrain is an overhead 3-D view with some of the finest game graphics we've seen. A dual-player mode is included so that two players can play simultaneously, each with their own window.

GST Holdings LTD, from England, is showing a C COMPILER, a MACRO ASSEMBLER and a MacWrite-like word processor. 1st WORD is a full-feature word processor written specifically for the GEM interface.

Up to four document windows can be displayed and manipulated from the desktop. Function key commands are represented by icons at the bottom of the screen. You can press the function key, or click on its icon with the mouse. Writing functions are mostly keyboard controlled, while editing functions — such as cut and paste — are handled with the mouse.

While fonts are not yet provided, an interesting feature of 1st Word is its system font tablet which contains all of the special characters in the ST font. Normally inaccessible by other software, you can choose the special characters with the mouse and paste them into your document.

1st Word is expected to be available at \$99 in approximately two weeks.

VIP Technologies was showing the VIP PROFESSIONAL. Full, glossy, 250-page spiral-bound documentation and all. Any books written about 1-2-3 will pertain to VIP Professional. The VIP Professional sells for \$179.95.

FTL stopped by the ANTIC booths to show SUNDOG: The Frozen Legacy. The game is in final beta and looks absolutely spectacular. This is going to be a hot game on the ST! The graphics are meticulously detailed as are the strategic elements of the game itself.

EIGHT-BIT ATARI

Though the main Atari focus at COMDEX was the 520 ST, Atari's 8-bit line was also represented. As previously mentioned, the Amiga bouncing ball was pounding away on the 130 XE.

John Skrutch, Director of XE Software at Atari, told ANTIC the program had been given to him the night before the show. It looks remarkably similar to the Amiga demonstration, but runs in under 8K. "This will run on an Atari 400," said Skrutch. The program is available for downloading from CompuServe's SIG*Atari.

Also being shown for the 8-bit line was Atari's XM301 300-baud modem featuring direct hookup, auto-answer and phone number storage, and Russ Wetmore's XE-Term software. Thousands of the units are currently being shipped. Retail price is \$49.95.

And PLATO is finally shipping! After more than a year of anticipation, the educational on-line service is available in the Atari Learning Phone package. According to Skrutch, the Learning Phone includes the LP cartridge PLATO terminal emulator, a one year free subscription to PLATO (normally \$25) and one free hour of on-line time (normally \$7.75). Atari is releasing the full package for \$24.95. Atari 8-bit owners may also look forward to a home finance program called THE SILENT BUTLER — available at the end of the month for under \$30 — and a spectacular educational program called the ATARI PLANETARIUM which Skrutch expects out by Christmas at a price under \$50.00.

The Atari Planetarium displays the sky patterns in any time zone from 10,000 years in the past to 10,000 years in the future. You can choose your observation point from a map of the world, show the sky with or without constellation lines, and search for and track objects. This should be popular software in the school market.

Given the above collection of 8-bit software, it's evident Atari is aiming at the educational market with their low-end machines.

ANTIC also spotted a few of the new Atari XM801, dot-matrix printers in use, one at the VIP Technologies booth. They should be shipping next month with an approximate price tag of \$299.



ST SOFTWARE AVAILABILITY



A PARTIAL LIST OF SOFTWARE FOR
THE 520 ST

* Products marked with an asterisk (*) are available now.

PRODUCTIVITY
**NEOCHROME* ATARI CORP.
N/C
"3-D INTERIORS" ATARI CORP.
Price unknown at this time
"THE MANAGER" ATARI CORP.
Price unknown at this time
"DB MASTER" ATARI CORP.
List \$99.95 Club \$74.95
"DESK DIARY" ANTIC SOFTWARE
Price unknown at this time
"K-CALC" ANTIC SOFTWARE
Price unknown at this time
**DEGAS* BATTERIES INCLUDED
List \$39.95 Club \$29.95
"THE ISGUR PORTFOLIO SYSTEMS" BATTERIES INCLUDED
Price unknown at this time
"HOMEPAK" BATTERIES INCLUDED
Price unknown at this time
"FINANCIAL COOKBOOK" ELECTRONIC ARTS
Price unknown at this time
"HABA CHECK MINDER" HABA SYSTEMS
List \$49.95 Club \$37.45
"HIPPO SPELL" HIPPOPOTAMUS SOFTWARE,
List \$39.95 \$29.95
**PC/INTERCOMM* MARK OF THE UNICORN
List \$129.95 Club \$95.95
"EASY DRAW" MIGRAPH, INC.
List \$149.95 Club \$129.95
**EXPRESS* MIRAGE CONCEPTS
List \$49.95 Club \$37.45
**ST TALK* QMI
List \$17.95 \$13.45
"THE GRAPHIC ARTIST" PROGRESSIVE
COMPUTER APPLICATIONS
Price unknown at this time
**REGENT WORD* REGENT SOFTWARE
List \$49.95 \$37.45
**THE PROFESSIONAL* VIP SYSTEMS
List \$179.95 Club \$134.95
**TYPESETTER* XLENT SOFTWARE
List \$34.95 Club \$26.29

EDUCATION

"ATARI PLANETARIUM" ATARI CORP.
List \$79.95 Club \$59.95
"MAPS AND LEGENDS" ANTIC SOFTWARE
Price unknown at this time
**HIPPO COMPUTER ALMANAC* HIPPOPOTAMUS SOFTWARE, INC.
List \$39.95 Club \$29.95
**HOMEWORK HELPER - MATH* SPINNAKER
List \$49.95 Club \$37.45
**HOMEWORK HELPER - WRITING* SPINNAKER
List \$49.95 Club \$37.45

UTILITIES & PROGRAMMING

**COLR* ANTIC SOFTWARE
List \$39.95 Club \$29.95
"LATTICE C" ANTIC SOFTWARE

List \$99.95 Club \$74.95
**MACRO ASSEMBLER EDITOR* ANTIC SOFTWARE
List \$99.95 Club \$74.95
"META PASCAL" ANTIC SOFTWARE
Price unknown at this time
**4xFORTH* THE DRAGON GROUP
List \$99.95 Club \$74.95
**HABA HIPPO C* HABA SYSTEMS
List \$79.95 Club \$59.95
"HIPPO ST DISK UTILITIES" HIPPOPOTAMUS SOFTWARE, INC.
List \$49.95 Club \$37.45
"HIPPO ST RAMDISK" HIPPOPOTAMUS SOFTWARE, INC.
List \$34.95 Club \$26.20
**MINCE* MARK OF THE UNICORN
List \$175.00 Club \$130.00
**SOFT SPOOL* MICHTRON
List \$39.95 Club \$29.95
**M-DISK* MICHTRON
List \$39.95 Club \$29.95
"MI-TERM" MICHTRON
List \$39.95 Club \$29.95
"TRANSFER IBM/ATARI" MICHTRON
List \$39.95 Club \$29.95
**HOLMES & DUCKWORTH TOOL BOX* MIRAGE CONCEPTS
List \$39.95 Club \$29.95
"PERSONAL DISKIT" OSS
Price unknown at this time
"PERSONAL PASCAL" OSS
Price unknown at this time
"PERSONAL PROLOG" OSS
Price unknown at this time
**COMPILED BASIC* PHILON
List \$99.95 Club \$74.95
"FORTRAN" PHILON
Price unknown at this time
"PASCAL" PHILON
Price unknown at this time
**MODULA-2* TDI
Price unknown at this time

RECREATION & ENTERTAINMENT

"MISSION MOUSE" ANTIC SOFTWARE
Price unknown at this time
"COLOR SPACE" ANTIC SOFTWARE
Price unknown at this time
"MOM AND ME" ANTIC SOFTWARE
Price unknown at this time
"MURRAY AND ME" ANTIC SOFTWARE
Price unknown at this time
"MARBLE MADNESS" ELECTRONIC ARTS
Price unknown at this time
"HIPPO ART I" HIPPOPOTAMUS SOFTWARE, INC.
List \$39.95 Club \$29.95
"HIPPO BACKGAMMON" HIPPOPOTAMUS SOFTWARE, INC.
List \$39.95 Club \$29.95
**CUTTHROATS* INFOCOM
List \$39.95 Club \$29.95
**DEADLINE* INFOCOM
List \$49.95 Club \$37.45

**ENCHANTER* INFOCOM
List \$39.95 Club \$29.95
**HITCHHIKERS GUIDE TO THE GALAXY* INFOCOM
List \$39.95 Club \$29.95
**INFIDEL* INFOCOM
List \$49.95 Club \$37.45
**A MIND FOREVER VOYAGING* INFOCOM
List \$49.95 Club \$37.45
**PLANETFALL* INFOCOM
List \$49.95 Club \$37.45
**SEASTALKER* INFOCOM
List \$49.95 Club \$37.45
**SORCERER* INFOCOM
List \$49.95 Club \$37.45
"SPELLBREAKER" INFOCOM
Price unknown at this time
**STARCROSS* INFOCOM
List \$49.95 Club \$37.45
**SUSPENDED* INFOCOM
List \$39.95 \$29.95
**WISHBRINGER* INFOCOM
List \$39.95 Club \$29.95
**THE WITNESS* INFOCOM
List \$49.95 Club \$37.45
**ZORK I* INFOCOM
List \$39.95 Club \$29.95
**ZORK II* INFOCOM
List \$49.95 Club \$37.45
**ZORK III* INFOCOM
**HEX* MARK OF THE UNICORN
**MUDPIES* MICHTRON
**FLIPSIDE* MICHTRON
"GOLD RUNNER" MICHTRON
"FLIGHT SIMULATOR" MICHTRON
"TIME BANDIT" MICHTRON
"SILENT SERVICE" MICROPROSE
**SUNDOG* OASIS SYSTEMS
List \$49.95 Club \$37.45
"UNIVERSE II" OMNITREND
* "TRANSYLVANIA" PENGUIN
List \$39.95 Club \$29.95
**FORBIDDEN QUEST* PRIORITY SOFTWARE
List \$39.95 Club \$29.95
* "ULTIMA II" SIERRA
List \$49.95 Club \$37.45
* "KING'S QUEST II" SIERRA
List \$49.95 Club \$37.45
"FLIGHT SIMULATOR" SUBLOGIC
"JET" SUBLOGIC
**FAHRENHEIT 451* TELLARIUM
List \$49.95 Club \$37.45

HARDWARE

"SMM801 PRINTER" ATARI CORP.
"SDM121 PRINTER" ATARI CORP.
**SF314 DISK DRIVE* ATARI CORP.
"ATARI HARD DRIVE" ATARI CORP.
"HIPPO EPROM BURNER" HIPPOPOTAMUS SOFTWARE, INC.

*PRINTERS EPSON,
OKIDATA, etc.
Most PC printers work with the 520ST's bi-directional parallel port.