#1 Guide To Atari ST

# START®

Volume 4, Number 9 | April 1990 | USA $14.95 • Canada $19.95

**ON DISK**

- ST Writer Elite Update
- PHA$AR version 3.0
- Super Jackpot Slots
- 1989 Tax Templates

**DOUBLE DISK INSIDE**

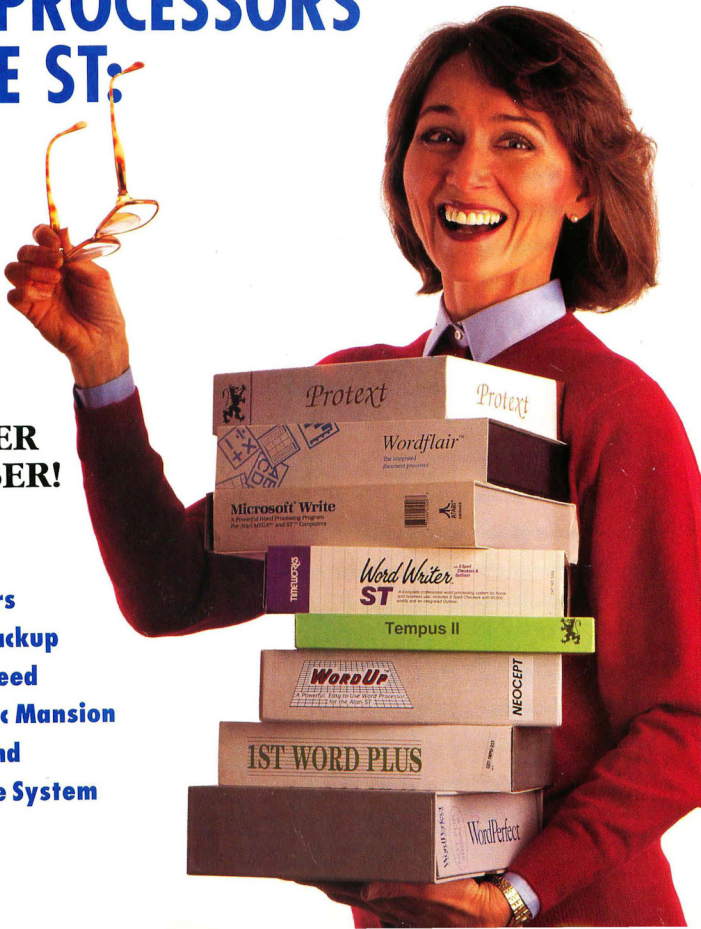
# WORD PROCESSORS FOR THE ST:

## HOW THEY STACK UP

## BE A POWER PHA$ER USER!

## REVIEWED:

- Desktop Publishers
- ICD's Fast Tape Backup
- MitchTron's PC Speed
- Lucusfilm's Maniac Mansion
- SSI's Star Command
- Atari's Lynx Game System

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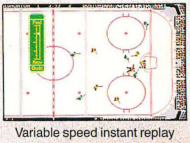
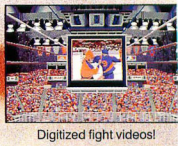


Variable speed instant replay



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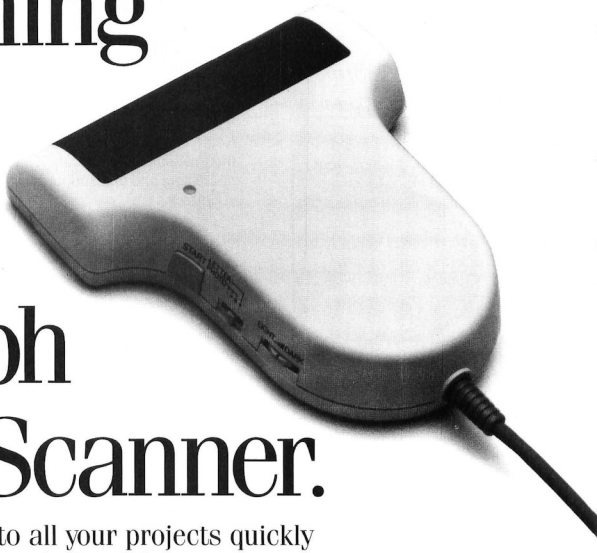

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ATARI ST

IBM EGA

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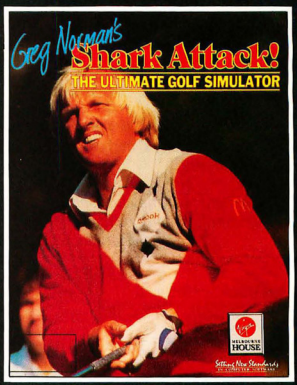


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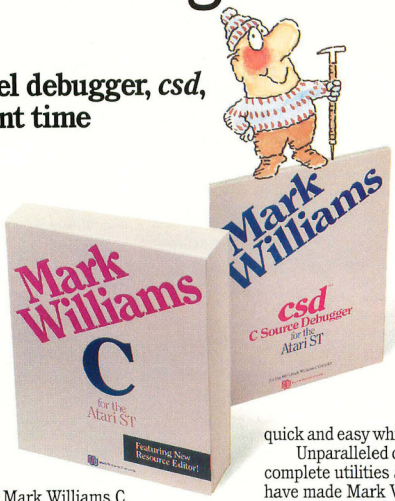


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# START

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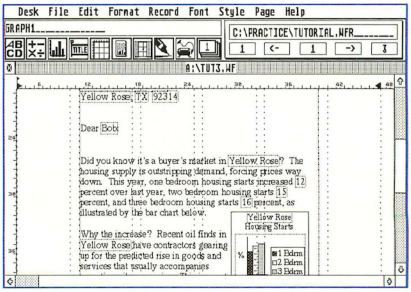


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# Editorial

## DOUBLE-SIDED DISK DILEMMA

The START disk has now been double-sided for six issues — enough time to gauge whether or not you like it. Well, we found out.

The idea of a double-sided START disk has always been appealing, because we found that we could give double-sided drive owners more, and do so without leaving single-sided drive owners behind. Overall costs to us were minimal, so the price of the magazine wasn't affected. We thought you'd love it.

Then the letters came.

Before the double-sided format, START routinely received "damaged" disks for replacement. The problems ranged from bad file sectors to a physically bent disk. The percentage of damage was significantly low.

With the November issue, however, your letters began to pour in. Some of you were delighted, some of you were outraged but too many of you returned your disk for replacement. This wasn't just one or two isolated cases. And all of your troubles with the disk were individual and varied, so it was difficult to pinpoint the problem and resolve it.

One thing, however, was clear: the Heidi-formatted, double-sided disk was indirect and confusing. Something had to be done.

### That Something

This is the last issue that will include the format. This does not mean that the START is abandoning the double-sided concept. We want to give you the most we can, but obviously, we need to make it accessible. So, we're currently (and feverishly) searching for a replacement.

### This Month

What exactly is a "word processor" and why do you need one? This month's cover story answers that question and gives you an idea what to look for in a good word processor and what's available for the ST.

This issue sees a revival of two columns that deserve reviving: "European Report" with Don Maple reporting from West Germany, and "Getting Started," the column designed especially for the ST novice.

On disk is a special bonus: Antic Software's PHA$AR version 3.0. This is perhaps the most popular home-accounting package ever developed for the ST. We think you'll appreciate its power to keep your personal finances organized and on track.

Tom Byron

TOM BYRON
START Editor

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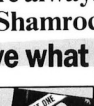


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# Dialog Box

### Hates Heidi Format

I do not like your new [double-sided] system. I find the instructions to be excessive and hard to follow. The reason you give for not using both sides of a disk in the normal way is not convincing. I hope for your sakes I am of a small minority.

David Brandon
Scarborough, Ontario

*You are part of a small minority, but one that is very important to us. So, due to the difficulties you and others have encountered with the Heidi format, we are discontinuing it next issue. Since many of our readers enjoy the double-sided disk, we're investigating ways to retain it in a different format. —START Editor*

### Graphics Guides

What books would you suggest on the following subjects:
1) 3D graphics, shading and raytracing;
2) Programming in GFA BASIC 3.07;
3) Atari Mega internals.

David Poole
Modesto, California

*1) In START Special Issue Number One, Matt Loveless recommends* Procedural Elements for Computer Graphics *by David F. Rogers;* Applied Concepts in Microcomputer Graphics *by Bruce A. Artwick; and* Geometric Modeling *by Michael J. Mortenson. Abacus Software publishes a book called* Atari ST Graphics & Sound . *Also call the Association for Computing Machinery's Special Interest Group on Graphics (ACM SIGGRAPH). Eugene Miya heads the San Francisco Bay Area chapter, (415) 694-6453. A university math/computer science library is another resource.*

*2) In the March 1989 issue of START, Contributing Editor David Plotkin recommends* Programming with GFA BASIC 3.0 *and* Concepts in Programming. *Both are intermediate level books available from Antic Software, 1-800-234-7001.*

*3) The folks who best know the Mega internals work for Atari. Call Atari Customer Service representative Dan McNamee at (408) 745-2000 ext. 2004 and ask what documentation is available. —START Editor*

### Small TT-ools

When can we expect a full test drive of the TT 030/2? I gather most ST programs will work, but how about accessories? Mail one of the gadgets to Dave Small and let him take it apart and install things and use blowtorches and jackhammers on it the way he does so well. Then let us know how that puppy performs in relation to the ST.

Larry E. Palm
San Francisco, California

*Good idea. We'll do it as soon as possible, which depends upon Atari building and shipping TTs. They are supposedly available to developers (like Dave Small), but the last person we talked to has been waiting six weeks for his machine. —START Editor*

### Ticker Tape Delay

I am writing out of concern for Atari's market stability. Can you print stock market reports for the month? You could compare Atari shares to those of other leading computer manufacturers so we readers will know what we're up against.

Frankie Seto
Calgary, Alberta

*Any stock market quotations we run would be out of date. Our production schedule is three months ahead of the publication date of the magazine. For example, this reply is being written in the first week of January. If you're interested in following Atari share prices, check the American Stock Exchange listings published daily in the business section of most major newspapers. —START Editor*

### Let's Hear It For Imagen

Recently, I purchased UltraScript. When I received the package I found out (real fast) that there was a bug that prevented the program from loading: two bombs and back to the Desktop. A call to Imagen resulted in the replacement of the disk via Federal Express Next Day Air at no charge. I even received a call the next day from one of their customer support technicians (are you reading this Vicki?) to make sure that it was working properly and ask if I had any further questions.

All that I can say is that this is what makes a first-rate company. Let's hear it for Imagen.

Mark LaCroix
Barre, Massachusetts

*We're always happy to recognize an outstanding effort. —START Editor*

### I Want My RGB

I have an Atari 520ST computer that I would like to hook up to an analog Tandy RGB Color Monitor CM-8. Can it be done, and if so, where can I get the necessary cables and connectors?

Bob Kemether
Brick, New Jersey

*continued on page 13*

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*continued from page 11*

*START Contributing Editor David Plotkin, who has more hardware at home than we have in the office, says it can't be done. The two devices aren't synchronized. You might be better off buying a used Atari monitor.—START Editor*

### Viva L'Atari

Several weeks ago I joined the Atari Revolution. This movement was launched by Donald A Thomas, Jr., President of Artisan Software. The movement's purpose is to make the public more aware and desirous of Atari computers. To do this, Mr. Thomas has developed suggested weekly activities to be implemented by Revolutionaries.

I, for one, am glad someone has grabbed the bull's horns in an attempt to make Americans aware that Atari is not just some game machine. Of course, Atari Corp. should have made this effort. Their competitors (i.e. Apple) spend millions making the case for their equipment. If the movement is successful, Atari Corp. will pay more attention to their American marker, establishing more dealerships, producing more machines, and advertising extensively and effectively.

Please throw your support to the Revolution.

Robert Hochwalt
North Canton, OH

*START magazine is very aware of the Revolution and wishes the movement success. Any campaign that works toward a greater exposure of the power and versatility of Atari hardware can do nothing but good.*

*Anyone who wishes to learn more about the Revolution may write to Artisan Software, P.O. Box 3213, Fontana, CA 92334. —START Editor.* ■

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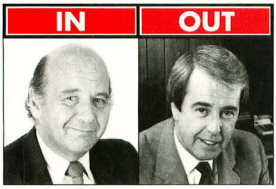
# News, Notes & Quotes

*BY STEPHEN MORTIMER, START CONTRIBUTING EDITOR*

## *Inside Atari*

• There's been yet another change of management at Atari. Mike Morand is no longer President of Atari Computer. David Harris, from the consumer products division, is now in charge of the computer division. Reportedly the change in management was amicable and was the result of personal reasons on the part of Morand.




*David Harris* *Mike Morand*

• The Stacy 2 and Stacy 4 have passed FCC Class A certification. This frees the computer for business/industrial use, although no actual restrictions on sales are made by the FCC. Both systems come with the respective amount of memory and a 40MB Conner hard disk drive. The Stacy 1, floppy-disk version has not yet been approved.

• Look for a new version of GDOS in 1990. It will use the UltraScript based fonts and use Imagen's smooth scaling software for screen representations. This will not be a Postscipt interp reter. Only the fonts from UltraScript will be used. Also, look for a multitasking TOS. According to Leonard Tramiel, multitasking is a "logical" extension of the operating system.

• Atari filed suit against Nintendo and codefendant Pepsico. The suit cites false advertising, unfair trade practices and unfair competition. All this comes as the result of ads that Atari claim were deceiving because of references to nonexistent color features on Nintendo's GameBoy. Nintendo is currently under Federal investigation for alleged monopolistic competition and unfair trade practices.

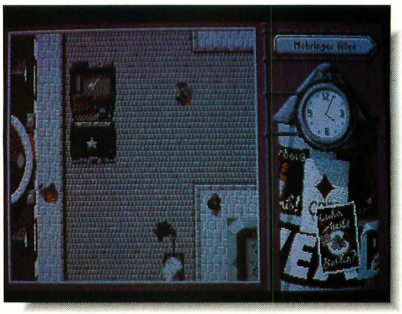
• Some new technical specifications for the STE have come to light. The four SIMM memory units protrude through the internal shielding of the STE, allowing for easy upgrades. The 68000 is a square, socketed PLCC chip. This, according to Jim Allen of Fast Technology, will make a

*continued on page 18*

## *EUROPEAN REPORT*

*BY DONALD MAPLE, REPORTING FROM WEST GERMANY*

The ST market in Europe is quite different from the North American one. Not only is the ST one of the most popular game machines over here but it's also considered to be a serious business computer. While France and the U.K. supply the bulk of games, Germany has produced a plethora of excellent professional software. This monthly report will focus on what's happening in Europe as it affects the ST community — use this column as a kind of crystal ball as to what lies ahead for the U.S. since most European products have a way of showing up there eventually.



**The Cold War revisited: East vs. West, a new spy thriller from West German game-maker Rainbow Arts.**

### All Work and No Play?

Rainbow Arts, a German software company, has just announced two new games for the ST. East vs. West is an "agent-simulation" game taking place during the Berlin airlift in 1948. The game revolves around an A-bomb

*continued on page 18*

# SUPERCHARGER

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*continued from page 16*

possible Turbo 16e upgrade very easy to install, requiring no soldering. Finally, the GLUE chip has now grown to an 84-pin monstrosity and the MMU and shifter chip have been combined into one large surface mount chip. In mid December, STEs began trickling into Canada.

• Rainbow TOS 1.4, contrary to reports, is a very solid operating system. Only a few programs, mainly games, are incompatible with this improved OS. Stories claiming that it has only compatibility with 60 percent of existing ST software are *false.* A conservative estimate places it well over 90 percent. Atari has now made available a two-chip set version of Rainbow TOS (part number CA400407). If your system originally had two chips, but was upgraded to the six-chip Rainbow TOS, and is having problems, try the two-chip version. There is an overloading problem with the six-chip set in some STs.

• Some final tidbits: STs were featured on the hit TV series "Growing Pains" and "Who's the Boss." Also, the American Stock Exchange is planning to make an Atari stock option available, pending approval from the Securities and Exchange Commission.

# Xerox Sues Apple

Is Apple getting a dose of its own medicine? Maybe. Xerox is suing Apple Computer for $150 million, contending that Apple misrepresented the originality of the Macintosh's and Lisa's graphics-based interface. Xerox is seeking $100 million in royalties and $50 million in damages due to the misrepresentation.

The Xerox Star and Smalltalk were systems designed in the late 1970s that used mice, windows, dialog boxes, menus and icons. Steve Jobs, then at Apple, was shown Smalltalk in 1979 and was very impressed with its user-friendly interface. Additionally, several employees of Xerox went to work for Apple in the early 1980s, giving Apple access to copyrighted material.

Apple, who is suing Hewlett-Packard and Microsoft for infringement on their graphical-interface copyrights, says the suit is without merit since ideas cannot be protected by copyright. Xerox's suit may be weakened by the fact that they licensed Apple to implement Smalltalk on Apple hardware. Also, Xerox has waited five years since the Mac's introduction to file the lawsuit

# Fat Bits

• Creative Microsystems, Inc. (CMI), the accelerator-board manufacturer, has gone out of business.

• Look for Atari to make a big splash in the new, open Eastern Europe, especially East Germany. The U.S. is considering the relaxation of its ban on export restrictions on computers to the countries in transition. This might allow the ST to be sold in this huge potential market.

• ISD has shipped DynaCADD 1.7 to dealers. The new version of the popular CAD program retails for $995 and includes many additional features along with a new 600 page manual.

• Bad news for Arkanoid fans: Taito has ceased development on the ST and a planned release of Arkanoid II has been postponed indefinitely. A c ompany spokesperson cited "smaller t han expected sales" for Taito products in the ST market as the major reason for the decision. ■

*If you have a hot Atari news item, let us know at* ***News, Notes & Quotes****, START Magazine, 544 Second Street, San Francisco, CA 94107.*

## EUROPEAN REPORT

*continued from page 16*

stolen from an American base in the U.K. Sam Porter is the U.S. secret agent who has the task of preventing the bomb from being passed on to the Soviets.

Conqueror is a tank simulation that boasts 16 different tank types roaming through 3D fractal landscapes. There are three different game types: action, attrition and strategy. Rainbow Arts negotiates their U.S. distribution for each game separately so I can't tell you where to get these games yet.

(On a side note: with the Berlin Wall rapidly acquiring the complexion of Swiss cheese and the [long overdue] revival of "peace and love," the above Cold-Warmongering games are a bit out of place.)

### Back to BASICs

One of the more sizeable and interesting shipments released in West Germany is from a company called Omikron. The name may not mean much to you, but over here it's identified with ST BASIC. This is primarily due to the fact that, in Europe, Omikron BASIC is shipped as standard with all ST computers. The only exceptions to this are France and the U.K.

Omikron BASIC is a superset of Microsoft MBASIC and as such is 99 percent compatible with it. Among almost 300 commands, which cover all of the standard BASIC keywords, are also various mathematical functions (ARCTAN, SINH, EXP, etc), system variables (MOUSEX, ▶

MOUSEY etc), structured programming control commands (REPEAT-UNTIL, WHILE-WEND, PROC etc) and sequential and random disk file access commands. In addition to interfacing with AES, VDI, GEMDOS, BIOS and XBIOS, Omikron BASIC is also able to do limited multitasking.

The program operates on two screens: a comfortable editor screen with menu bar on top and the familiar "OK" run/command screen. The compiler, sold separately for 179 *deutsch marks* (about $100), takes programs created using the interpreter and produces stand-alone .PRG files. These programs are then not only executable directly from the Desktop but run between two and 27 times faster than the interpreted versions. Both Omikron BASIC and the compiler are available in English.

Another Omikron program called 2nd_Word is a word processor with a peculiar difference: in order to run the program, you have to lay your monitor on its side. The screen then corresponds to the printed page perfectly. This is known as "portrait" in the desktop publishing industry. Unfortunately, the program runs on monochrome monitors only. In Germany the program retails for 59 *deutsch marks* (about $32). At this time the program is in German only.

Omikron is currently seeking a North American distributor. (Omikron, Erlachstrasse, 157534 Birkenfeld 2, West Germany, (7082) 50048.)

### Yugoslavian Program Does It All

STeve, which stands for "ST event editor" is an integrated "everything" program. Written by Primoz Jakopin of Yugoslavia, STeve has built a sizeable following as it spreads across the continent. There are now over 1,000 STeve users.

It is difficult to describe STeve because it does so many different things. The reference manual itself is a 600-page hardback. So here is a list of some of the features found in version 3.292: a database, a desktop publisher, a word processor, an image processor (including scanning), a spreadsheet — the list goes on. The program can be heavily customized by the use of over 30 user modifiable system tables. But don't let the complexity scare you since everything is quite clearly laid out. (Primoz Jakopin, Trnovska 261000, Ljubljana, Yugoslavia, (61) 226-329.) ■

***Steve Mortimer is a contributing editor for START and lives in Binghamton, New York. Donald Maple is Canadian by origin and presently lives and works in Dusseldorf, West Germany. He wrote "TT-TOS Secrets" in the February 1990 issue of START.***


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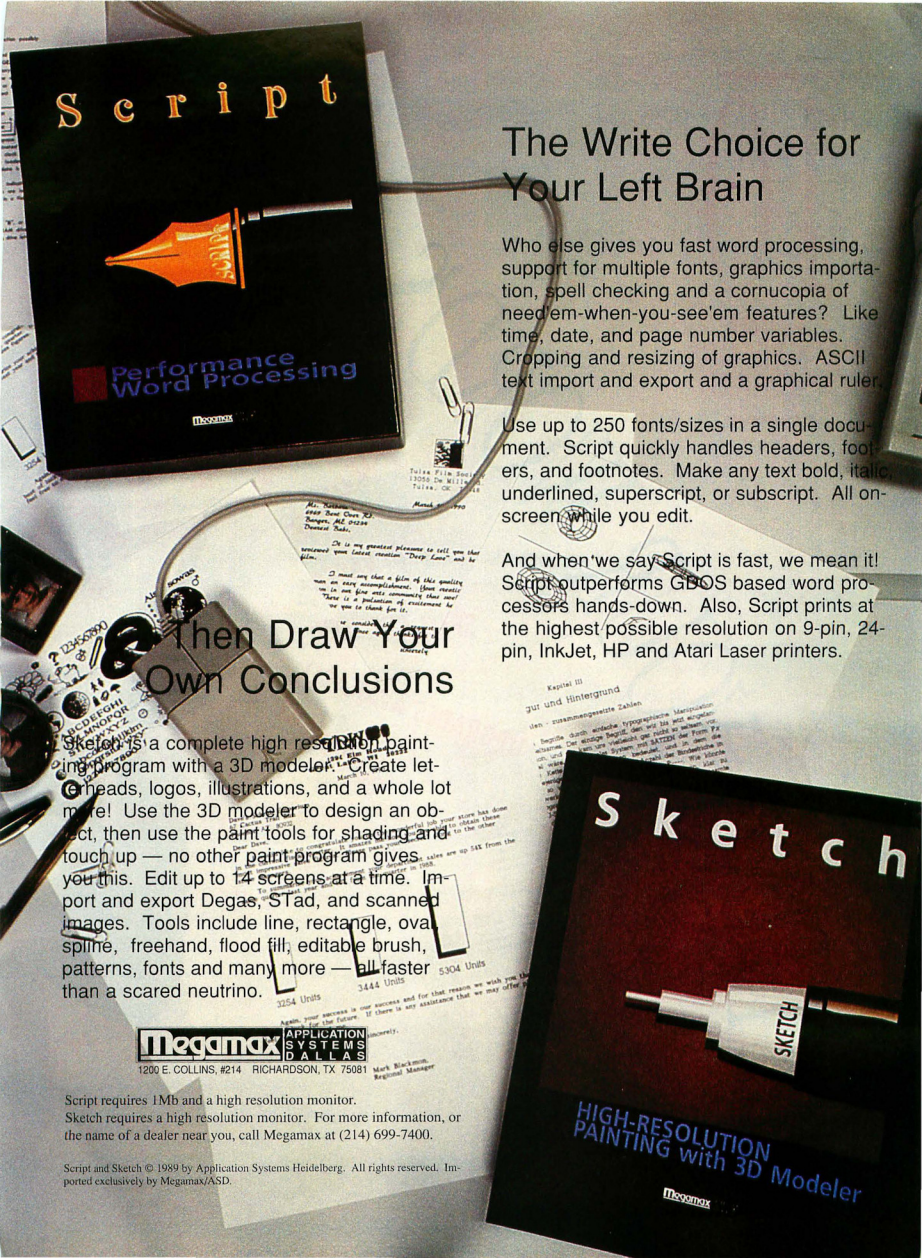


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# GETTING YOUR WORD'S WORTH

## 10 WORD PROCESSORS COMPARED

BY DAN FRUCHEY

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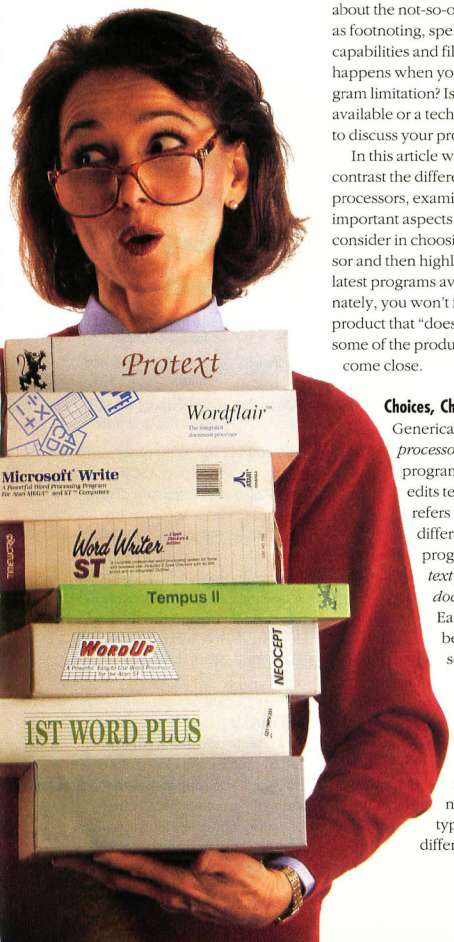
A word processor is one of the most basic and worthwhile pieces of software any computer user can own. In fact, your first software purchase will probably be a word processor.

Letters to Aunt Annette, reports for Professor Alderman, manuals for employees, summaries for the boss, newsletters, flyers and brochures all require a word processor. And a program that manipulates text is necessary for generating the source code that is compiled to create any computer program. Word processors can save you time and increase your productivity.

But while the decision to purchase a word processor is easy, choosing a program that will meet your current and future needs can be extremely difficult. Obvious factors like price, system requirements and ease of use all affect your final decision. But what about the not-so-obvious factors such as footnoting, spell checking, font capabilities and file portability? What happens when you run into a program limitation? Is there an upgrade available or a technical support staff to discuss your problems?

In this article we'll compare and contrast the different types of word processors, examine some of the important aspects you should consider in choosing a word processor and then highlight some of the latest programs available. Unfortunately, you won't find a single product that "does it all" though some of the products listed here come close.




### Choices, Choices

Generically, the term *word processor* refers to any program that creates and edits text. Specifically, it refers to any of three different types of programs: *text editors*, *text processors* and *document processors*. Each product has been developed for a select group of users and, although many of the programs are designed for overlapping markets, you may find yourself needing all three types of software at different times.

### Text Editors

Text editors are the favorites of programmers and those who need to create short documents on an occasional basis. These programs consume very little RAM, are inexpensive, easy to learn and, because the programs are stripped to their bare essentials, are extremely fast. Text editors don't use most of the standard layout options used in word and document processors. You won't find pagination, multiple font styles, footnoting, spell checking or a thesaurus.

The absence of these options is deliberate. In fact, those who use text editors don't want the headaches of dealing with these extras because they tend to slow down screen activity and consume RAM that could be used for extra lines of source code or a shell program. That's not to say that you can't add headers and footers to a document or center text, but these must be created manually and, unless you're a little masochistic, you're better off with a text processor.

All of the essentials, including cut and paste, search and replace, macros and word wrap, are available but there is little provided beyond these basics. Don't look for sophistication in a Text Editor; the key to their appeal is speed and ease of use.

### Text Processors

The term text processor refers to an advanced text layout program. It combines all the features of a text editor with advanced options such as automatic hyphenation, text justification, variable spacing, multiple fonts and styles and much more.

You might want to think of a text processor as an intelligent typewriter. It keeps track of basic operations so you don't have to. A text processor controls tabs, spacing and margins so all pages maintain a uniform appearance. Documents are automatically numbered and titled, footnotes are placed correctly without effort and minor changes can be made without ▶

retyping an entire page.

Text processors keep track of the number of words you have typed, check you're spelling, merge and insert information from mailing lists and effortlessly print multiple copies of a document.

### Document Processors

The latest addition to the word-processing market is the document processor. This type of program combines many aspects of desktop publishing, databases and spreadsheets with familiar word-processing options.

The premise behind the document processor is quite sound. Many users have only an occasional need to produce documents that use graphics, mathematical formulas or database information. A document processor lets you combine some or all of these needs without switching programs or employing software that will only be used on an occasional basis.

While this solves a problem it also creates others. With one exception, the current batch of document processors are unable to use spell checkers, they lack a thesaurus and screen redraws are relatively slow.

On the positive side, document processors will merge graphics from many sources, use variable measurements, grids and line spacing, possess multiple fonts, design master pages, create simple databases and perform mathematical computations.

### Factors To Consider

Before you buy a word processor there are many factors to consider. The following lists some of the less obvious ones that may affect your decision.

### Fonts

Does the program use GDOS fonts or those built into your printer? Programs that use GDOS fonts for printing tend to take much longer to produce a page. On a dot-matrix printer, the print head must make a double pass, slowing document production dramatically. The output from a GDOS program is cleaner, more versatile and easier to read but speed could make a critical difference in program selection. Depending on the printer, some GDOS programs can't print unless you reduce the number of fonts available or add more RAM.

### Footnotes/Endnotes

A footnote is a comment or reference placed at the end of a page. An endnote is a comment or reference that is explained at the end of a document. The existence of a footnote or endnote is indicated by a letter, symbol or number typed in superscript just to the right of the text it references. The same symbol is used again at the site of the comment. Footnotes and endnotes are inserted automatically into the body text and pagination is re-organized automatically so comments will fit in the appropriate places.

A simple claim that these options are included in a program isn't enough. Find out whether the footnotes/endnotes can be edited, moved, linked or defined with a separate font. Most users don't even need this option but if you require footnotes or endnotes make sure of what you are getting. Each software company has a slightly different understanding of what these options should do.

### Memory Requirements

Most word-processor publishers state that only 512K of RAM is required to run the program — it's a smart business move to design programs that will work on all Atari systems. But don't be misled; not every program can live up to the claims made on the packaging. Although most programs will work with 512K systems, you may not be able to access some of the options that swayed you into purchasing the software. Once the program is loaded, try running the spell checker and thesaurus, place all the font styles and sizes on the screen at one time and load a large document into memory. Now print a page. Still running? Congratulations, you've got a winner.

### Portability

There will never be a piece of hardware or software that will last for all time. Eventually, you'll upgrade to a faster and more flexible system or another word processor. If you're moving to another Atari computer, such as the 68030-based TT, there's no problem; programs and files are completely compatible if they're written using the Atari standards. If you're switching to another word processor, find out if file formats are compatible or if there is a conversion program available. The following chart is provided to help you make software changes:

| Program: | Converts Files From: |
|---|---|
| 1st Word Plus | 1st Word, Word Writer (file formats compatible) |
| Protext | 1st Word |
| Word Writer | 1st Word, 1st Word Plus (file formats compatible) |
| WordPerfect | ST Writer, 1st Word, Word Writer |
| ST Writer Elite | WordPerfect, 1st Word, 1st Word Plus, Word Writer |

Of course, any word processor will import and export ASCII text files. (ASCII stands for American Standard Code for Information Interchange. It is a standard code adopted to facilitate the interchange of data among various types of data processing and data communications software.) If you find this method adequate then you can interchange files among any of the word processors available.

### Spell Checking

If you create documents that will be read by anyone but close friends and relatives, a spell checker is an essential part of your software collection. Minor spelling mistakes become glaring errors that reflect

## HOW THEY STACK UP

| Name | Company | System Requirements | RAM Req. | Footnotes/Endnotes | Spell Checker | Thesaurus | Graphics | Graphic Types | Fonts | # Editing Windows | Manual | Uses GEM | User Configurable | Price |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Edit ST | Robust Software | Any ST/Mega | 512K | N | N | N | N | n/a | System | 1 | Fair | Y | Y | $59.95 |
| Tempus II | MichTron, Inc. | Any ST/Mega | 512K | N | N | N | N | n/a | System | 4 | Good | Y | Y | $79.95 |
| ST Writer Elite | Atari Corp. | Any ST/Mega | 512K | N | N | N | N | n/a | System | 1 | Fair | Partial | N | Free (P.D.) |
| Protext | MichTron, Inc. | Any ST/Mega | 512K | N | Y | N | N | n/a | System | 2 | Fair | Mouse Only | Y | $199.95 |
| Word Writer | Timeworks, Inc. | Any ST/Mega | 512K * | N | Y | Y | N | n/a | System | 4 | Good | Y | N | $79.95 |
| WordPerfect | WordPerfect Corp. | Any ST/Mega | 512K | Y | Y | Y | N | n/a | System | 4 | Excellent | Y | Y | $250 |
| Microsoft Write | Atari Corp./Microsoft | Any ST/Mega | 512K | Y | N | N | N | n/a | GDOS † | 4 | Fair | Y | N | Call |
| 1st Word Plus | GST Holdings Ltd. | Any ST/Mega | 512K | Y | Y | N | Y | .IMG | System | 4 | Good | Y | N | $99.95 |
| Word Up | Neocept, Inc. | Any ST/Mega | 512K | Y | N | N | Y | .NEO, Degas, .IMG, .GEM | GDOS † | 4 | Good | Y | Y | $79.95 |
| Wordflair | Blue Chip Int'l, Inc. | Any ST/Mega ‡ | 1 Mb | N | N | N | Y | .IMG, .GEM | GDOS † | 1 | Excellent | Y | N | $99.95 |

* Dictionary not usable with 512K
† (Typewriter, Swiss, Dutch)
‡ Monochrome monitor and hard disk recommended by manufacturer

upon your abilities. If the first impression you make is based on a document full of misspelled words your chances of being taken seriously are diminished.

Currently, there are six dictionaries available for the ST. They vary in size from 36,000 to 115,000 words. If you are simply creating personal correspondence, one of the smaller dictionaries is fine. If you are producing professional documents, the smaller dictionaries are severely limited, they slow the correction process and increase the possibility of mistakes.

The most versatile dictionaries check words phonetically; they suggest possible variations on misspelled words, include the plural forms of words along with their various suffixes and recognize compound words and word contractions. All dictionaries allow the addition of specialized words in user-defined supplemental dictionaries. Make sure the program you purchase uses a dictionary designed for your country. Many common English words are spelled quite differently in Canada, Great Britain and the United States. Is it cheque or check? Colour or color? If a foreign dictionary is used by a child, some of the variations could cause problems.

Of course, you shouldn't disregard a word processor simply because it lacks a spell checker or employs a limited one. You can also purchase a stand-alone spell checker such as Thunder! from Electronic Arts.

### Thesaurus

Sometimes it's difficult to find words that will let us communicate effectively. We know what we mean to say, but wind up expressing ourselves ambiguously. That frustrating feeling of having a word "on the tip of your tongue" is common to all, but very few of us do anything to remedy it.

A thesaurus is a utility that suggests possible synonyms (words with similar meanings) that can help you master this shortcoming. It helps to increase your vocabulary and supplies words that can enliven passages of text.

Currently there are only two programs that provide a thesaurus: WordPerfect and Word Writer. If your program lacks a thesaurus *don't* fret, you can also purchase an accessory version of the Word Writer thesaurus separately in Timeworks' software package Partner ST.

### User Support/Upgrades

No word processor is ever truly complete. There is always a bug fix, upgrade request or potential problem that needs to be dealt with. Do the publishers of your word processor support their product? Has the company been around awhile and established a good reputation? Check the READ_ME.DOC file on the disk, when was the latest version released? If a company hasn't released any upgrades for several years be cautious about purchasing their product, you may wind up as an orphan.

### WYSIWYG

WYSIWYG (pronounced wizzeewig) is an acronym that stands for "What You See Is What You Get." Most ST ▶

word processors provide an accurate screen representation of what your document will look like. Bold text is actually bold, centered text is actually centered, pictures and fonts approximate their final appearance on paper. WYSIWYG programs save time, paper and avert frustration. For beginners and advanced users alike, WYSIWYG word processors make learning and using a program easier and more enjoyable.

Some ST users, particularly converts from the IBM world, are strangely reluctant to use WYSIWYG word processors. Take heart refugees from Big Blue: there are non-GEM programs that allow the input of control symbols instead. With these programs you can invoke a preview mode that allows viewing of the document in a pseudo WYSIWYG environment. However, editing cannot be performed in this mode, the document can only be viewed.

## The Programs

Finally, we arrive at the actual programs. These are not reviews, simply summaries of product capabilities and notes on significant aspects of each product's high points. A chart is also included here to compare the salient basic features of each product.

Although it is impossible to precisely classify many of the programs, I have attempted to list them according to their approximate categories. Products that are clearly text editors, such as Edit ST, are listed first, followed by programs that combine aspects of a text editor and a text processor, such as ST Writer Elite. Products that are clearly document processors, such as Wordflair, are preceded by programs that combine aspects of text and document processors, such as 1st Word Plus. These are rough classifications. The divisions do not imply personal product preferences or make a statement as to which products are the best. Every product presented here meets a niche in the Atari word-processing community; it remains to be seen if they will meet the needs for which they were designed.

Some of the programs mentioned here are entirely new or significantly upgraded. Look for complete reviews in upcoming issues.

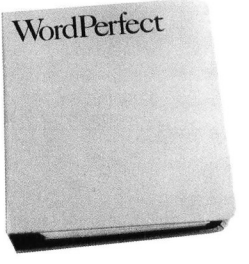
### Edit ST (Robust Software Inventions)

Fast, easy to use and self explanatory, Edit ST is a text editor that is a joy to use. The program requires only 85K of RAM and was clearly developed by a programmer with programmers in mind. The disk includes a calculator accessory and an ASCII/decimal/hexadecimal conversion code accessory. The manual is clearly written and appears to have been designed and published using an Atari computer.

### Tempus II (MichTron)

Tempus II is a slick text editor that provides almost any option a programmer could ever ask for. Includes a built-in RPN calculator, character-conversion tables, a unique file-selector box with masking template for locating source codes and much more. It uses its own unique Desktop that includes GEM-like icons such as a trash can, clipboard and disk drives.

I can only recommend Tempus II for programmers; it's too specific for those who only need to edit text on a casual basis. It will take sometime to become acquainted to the many modes available in this text editor, but learning time is much shorter than that required with a text processor.



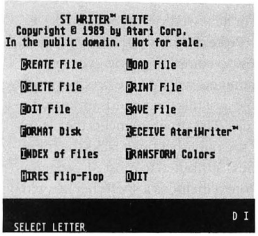

### WordPerfect (WordPerfect)

One of the most powerful text processors available on any system has made its way to the Atari market. While it's a little option heavy for many home users, it will certainly grow with your needs.

Learning to use the functions completely requires more time than most other products because of the many options available. The program is highly configurable and, once you have defined base page layouts and your own macros, much of the page creation process is automated.

Product support is excellent with regular upgrades and unlimited phone support from knowledgeable representatives. The program runs almost identically to its siblings on other systems. Atari owners who have used the program on PCs will have no problem running WordPerfect almost immediately.

WordPerfect includes a thesaurus and a spell checker with a 115,000-word dictionary.




## ST Writer Elite (Atari Corp.)

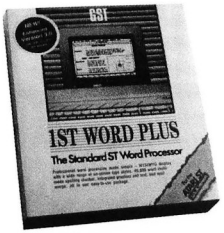
Dr. Bruce Noonan brings us the latest update to a classic public-domain favorite. ST Writer Elite is fast and versatile. It's a full text processor yet it works with the lightning speed of a text editor. For those non-WYSIWYG users mentioned earlier, this program is an excellent option. It lets you switch from a GEM-like environment to a mode that allows keyboard commands alone.

One of the best parts about ST Writer Elite is that it's free! (Editor's Note: *This issue's START disk includes the latest update of ST Writer Elite. Check the supporting article elsewhere in this issue for more information.*)

## Microsoft Write (Atari Corp./Microsoft)

Microsoft Write is easy to use and has incredible potential but Atari has failed to provide adequat e support, upgrades or bug fixes. Microsoft has disowned the product for reasons known only to Atari and themselves. Promises of a spell checker and other additions have failed to materialize, making Microsoft Write a software pariah.

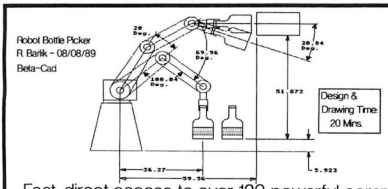
If you require multiple fonts in a variety of sizes, Microsoft Write does an excellent job. Resumes and reports look great and includes a variety of powerful layout options. Microsoft Write will print using GDOS fonts, your printer's internal character set or metafiles which can be imported for use by programs such as Timeworks Publisher and Easy Draw.




## 1st Word Plus (GST)

The big brother of 1st Word, this document processor is a welcome relief to users who are still using the original program released in the early days of the ST. All files from the original program are completely compatible but 1st Word Plus adds enough options to make it infinitely more valuable than its predecessor. The program can import pictures and works with the fonts included with your printer.

A powerful mail-merge program and picture conversion utilities are included with in 1st Word Plus along with an intelligent spell checker that uses a 40,000-word dictionary. At this time, 1st Word Plus is the only program that incorporates graphics and still allows access to a spell checker. ▶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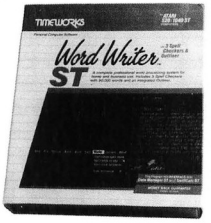
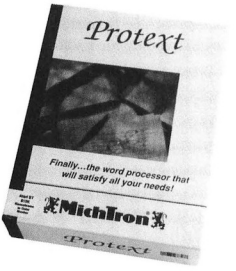



## Word Writer (Timeworks)

At the time of this writing, Word Writer is the most popular text processor available for the ST. Small wonder: it's well rounded, easy to use and logically organized. The program takes advantage of almost every standard word-processing function the average user requires.

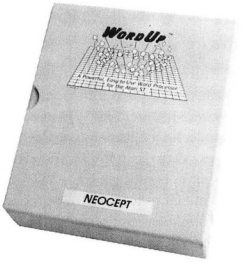
Word Writer includes a document outliner, thesaurus and spell checker with a 90,000-word dictionary. The dictionary is not very intelligent, slowing the correction process, but it is adequate for most uses. The only major addition that can be made to this program is a footnoting function. Timeworks has not released an upgrade in two years but they provide ongoing user support by phone.




## Protext (MichTron)

Michtron's latest addition to the word-processor market incorporates features of a text editor and text processor with a command-line interpreter. Protext is powerful and inclusive but at times a little overwhelming. The number and types of commands that can be inputed are great but text processing is slow and sometimes awkward with the format presented. Protext does not use GEM drop-down menus or windows — commands must be typed in manually or accessed via keyboard macros.

Protext is not for those who are new to computing; however, programmers will find the product enjoyable as it fills their needs in several areas. The program meets the claims of the publisher but it lacks the friendliness attributed to most ST programs. Protext includes a spell checker with a 36,000-word dictionary.




## Word Up 2.0 (Neocept)

The latest version of Word Up lets you use fonts in sizes from 250 points and it can now import .GEM metafiles. This document processor combines text, graphics and multiple GDOS fonts to produce outstanding

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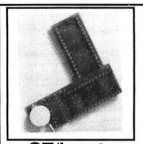

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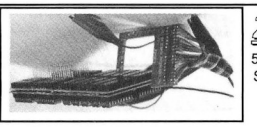

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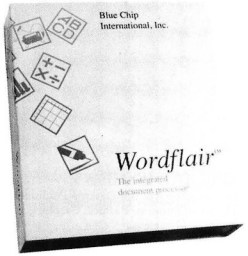
documents. The program is logically arranged and uses a wide variety of layout commands that let you adjust almost any page component. Word Up will create endnotes but does not generate footnotes.

An upgrade is currently in the works that will include additional fonts, a spell checker, thesaurus and importation and exportation of files in 1st Word format. Shelby Moore, President of Neocept, has attempted to provide a program that equals or exceeds his competition on all levels. He and his staff are committed to ongoing support of their products and the ST.




### Wordflair (Blue Chip International)

Blue Chip International has finally released Wordflair, a unique document processor that at one time was to be released under the Atari software label. Wordflair combines multiple GDOS fonts, math functions, a graph generator, database and graphic importation with text processing. The program creates everything internally except image and metafile graphics which must be imported.

Wordflair is a welcome addition to the Atari market that could bring new popularity to an already outstanding machine. It's the closest thing I've seen yet to an all-in-one product. Wordflair is great for creating forms and form letters and will increase speed and flexibility in business settings. With Wordflair you can concentrate on creating a page, not the half a dozen additional programs you normally need to create a page that uses all of these page components.

One nice addition is that Wordflair includes a special edition of G-Plus, the lightning fast GDOS replacement from Codehead Software. It speeds up screen activity, redraws and loading. Nice touch Blue Chip!

### Something for Everyone

With a list of products like this, there is something for everyone. All I can recommend is that you pick the product that works best for you. Visit your local dealer, try out copies of programs that might do the job and enjoy using your computer by purchasing a word processor tailored to your needs. ■

***Dan Fruchey works as a paramedic in Santa Rosa, California and runs a small clip-art business on the side.***

**PRODUCTS MENTIONED**

**Edit ST**, $59.95. Robust Software Inventions, 383 N. Wilmot Road, #108B, Tuscon, AZ 85711, 602/750-0921.

**1st Word Plus**, $99.95. 1st Word Plus, P.O. Box 15008, Portland, Maine 04101, 207/874-0702

**Microsoft Write**, call for price. Atari Corp., 1196 Borregas Avenue, Sunnyvale, CA 94086, 408/745-2000.

**Protext**, $199.95; **Tempus II**, $79.95. MichTron, 576 S. Telegraph, Pontiac, MI 48053, 313/334-5700.

**Wordflair**, $99.95. Blue Chip International, Inc., 501 Second Street, Suite 414, San Francisco, CA 94107, 415/243-9605.

**WordPerfect**, WordPerfect Corp., 288 W. Center Street, Orem, UT 84057, 801/227-4410.

**WordUp version 2.0**, $79.95. Neocept, Inc., 547 Constitution Avenue, Unit A, Camarillo, CA 93010, 805/482-0313.

**WordWriter**, $79.95. Timeworks, 444 Lake Cook Road, Deerfield, IL 60015, 312/948-9200.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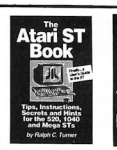


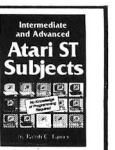


Ralph Turner's new book, *Intermediate & Advanced Atari ST Subjects*, covers hard drive management & optimization, IBM emulators, disk structure and file recovery, connecting a 5¼-inch floppy drive, assembling a hard drive system from inexpensive components, SCSI ID numbers and LUN IDs, sector and file editing, binary, hexadecimal and decimal codes, ASCII file problems, escape codes, miscellaneous tips, and much more. His *Atari ST Book* covers RAM disks, the AUTO folder, Desktop tricks, Installing an Application, adjusting the Control Panel's Palette Settings, Public Domain Software, Copying, Printers, Desk Accessories, Telecommunications, the Item Selector, and much more. Neither book requires a knowledge of programming. $16.95 each, plus $2.00 shipping each ($2.50 each to Canada). Check, Money Order, VISA or MasterCard. Index Legalis, Post Office Box 1822-49, Fairfield, IA 52556. Phone: (515) 472-2293

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*Reviewed:* Mark Williams C. ; Menu+.

### SUMMER 87

*On Disk:* The aSTronomer: Text Compression and Huffman Coding with Personal Pascal: Flicker Animation Program; MIDISAVE.
*Reviewed:* Word Writer ST; Data Manager ST; Swiftcalc ST; Five BASICs compared

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### SPRING 88

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*Reviewed:* Personal Finance Programs; Desk Accessories Compared.

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*On Disk:* CardSTack Database; START Selector; Play the Market.
*Reviewed:* WordPerfect; F-15 Strike Eagle.

### SUMMER 88

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*Reviewed:* Microsoft Write.

### SPECIAL ISSUE #4

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*Features:* Editor's Choice.
*On Disk:* GFA BASIC 2.0; Spanish Mastery, STARTKey Revisited; Slither.
*Reviewed:* GFA BASIC 3.0; Creator and Notator.

## FEBRUARY 89

*Features:* Thanks for all the Fish; ST: 1999.
*On Disk:* Dah-Ditter; Moon Calendar; Kamikazee Chess, Killer Chess; VCR Organizer.
*Reviewed:* Atari's Planetarium; Robtek's Skyplot; Mirage Sample Editor's.

## MARCH 89

*Features:* Three Artists Who Use the ST; Software Rental.
*On Disk:* Seurat Draw and Paint Program; Assembled Saucers; ST Coloring Book.
*Reviewed:* Graphics and Animation Programs Compared; Digigram's Big Band; Overview of Six CAD Programs.

## APRIL 89

*Features:* Jimmy Hotz's MIDI Magic; Dr. T Inteview; The New TOS ROM Error Codes.
*On Disk:* ST Writer Elite 3.0; Poker Solitaire; RAM Baby.
*Reviewed:* Utilities; R/C Aerochopper; MIDI Draw.

## MAY 89

*Features:* CompuServe's Sports Forum; Atari Goes to College.
*On Disk:* Space Wars 2400; GFA Object; 1988 Tax Template; SIFT (START's Instant File Translator
*Reviewed:* Buyer's Guide to Telecommunications Programs; Calamus.

## JUNE 89

*Features:* Do Anything Business Computer; Arcade Addiction.
*On Disk:* GFA Vector, Match Quiz St; Screen-writing with WordPerfect; ST Pinochle; Exploring Spreadsheets; Traveling Mattes.
*Reviewed:* Juggler II; Switch/Back; Revolver; Graphics Tool from Migraph; MIDI Drummer.

## JULY 89

*Features:* MIDI in the Future T ense; Making MIDI Affordable
*On Disk:* Babel; GFA Object; The ST Theremin; START Arcade
*Reviewed:* Sound Digitizers; EZ-Score Plus; Pagestream; Turbo ST1.4; Hi Soft BASIC and Hi Soft BASIC Professional.

## AUGUST 89

*Features:* Secrets of a Good User Interface; Tools of the Trade
*On Disk:* POGO; File Search; Splines on Splines; Stumbling Blocks
*Reviewed:* Ultrascript; DevpacST; dBMAN V; After-Market Floppy Disk Drives; MIDI Magic

## SEPTEMBER 89

*Features:* Sam Tramiel Interview; Computer Game Violence
*On Disk:* Avecta I: Ebora; The Seven Skulls; Newspeed; Slither Screen Editor; Cinko
*Reviewed:* Eight Games; Fleet Street Publisher 3.0; STAC, STOS and Tale\$pin; NewScore

## OCTOBER 89

*Features:* STACY and Portfolio Preview
*On Disk:* CAD-3D-to-DynaCADD Converter; Schedule Maker; ST Softguide; WordPerfect Macros; Boingo
*Reviewed:* DynaCADD 1.56; Hotwire, NeoDesk 2.0 and VDOS ProQueue; Entry-Level Sequencers; Computer Guide to the Solar System

## NOVEMBER 89

*Features:* The Transputer Connection: Atari and Perihelion; Donny Osmond Interview; The START Disk's New Look
*On Disk:* RezRender; JULIA; Final Approach Controller

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# ST WRITER ELITE

***The perennial champion of Atari's public-domain word processor presents a farewell offering and claims to retire, but we're not sure we believe him. ST Writer Elite runs in all three resolutions.***

BY BRUCE D. NOONAN, M.D.

*Updates for all three languages of ST Writer! Files STW.ARC, STW_SPAN.ARC, STW_GERM.ARC and STW_MAN.ARC are on Side 2 of your START Disk.*

I really didn't want to do it. I felt ST Writer was as good as it could get. Then I received a letter on GEnie from Jim Briant of Richland, Wash., asking me to make some changes. His suggestions were good and I soon found my wife giving me those looks that means she's feeling ignored or wants me to change my 2 year old's diaper.

I then began to look critically at ST Writer and noticed a few annoyances. Since I was on a roll and my wife was already mad at me, I decided to really go for it and fix it up one last time. The result is ST Writer Elite version 3.6.

### ST Writer Elite Version 3.6: Changes Since Version 3.0

- There is no longer a separate resource file.
- The Global Search and Replace is now roughly 60 times faster.
- The free memory byte counter can now accommodate values up to 95MB. This makes it compatible with the TT, which can handle more than 25MB.
- In non-GEM mode, in many instances the [Enter] key acts the same as the [Return] key.
- Placing the cursor with the mouse now updates the line/column numbers immediately, as opposed to

# VERSION 3.6

## The Final Revision to this Popular Word Processor (Maybe)

updating them on the next key stroke.

• An info status line has been added at the top of the GEM menu screen which keeps track of the name and path of the current file in memory.

• When you save a file under the name of one that exists, you are warned, and the alert box tells you the name of the file that you are attempting to overwrite (nice, in case you click on the wrong file, or type in a name that you didn't know was already a file in the same directory).

• If you have TOS 1.4 in ROM, file-selector boxes now indicate the operation (e.g., did you select delete, load, save or what?).

• All disk i.o. has been updated and thoroughly debugged.

• [Control]-[A], [Control]-[Z], [Control]-[Right Arrow] and [Control]-[Left Arrow] now work in the command box.

• Search/Replace allows a null replacement (bug in versions 3.2 and 3.3).

• AtariWriter(tm) files can now be loaded from another folder (bug in 3.4).

• There's now an option to print only odd, or only even pages, which lets you print your document double-sided, like a book, by flipping the sheets.

### Using ST Writer Elite

To use the latest version of ST Writer Elite, boot this month's START disk; the START menu program runs automatically. At the main screen, click on Prepare Disk, then select "ST Writer Elite version 3.6." The program will un-ARC directly onto the destination disk you specify. Before using this update, read the ASCII file READ_ME. It contains bug alerts and a list of changes in version 3.6. To run ST Writer, double-click on STWRITER.PRG at the Desktop. ST Writer runs in all resolutions.

I also updated the Spanish and German language versions. To run those, click on Prepare Disk at the main screen of the START menu program. Select "ST Writer Elite: Spanish" for the Spanish version; select "ST Writer Elite: German" for the German version. The program will un-ARC directly onto the destination disk you specify. To run the Spanish version, double-click on STW_SPAN.PRG; to run the German version, double-click on STW_GERM.PRG.

(Editor's Note: *We also republished the ST Writer Elite manual on Side 2. It hasn't been edited to reflect the changes since version 3.0, but we felt it would be useful for those readers who are new to the ST community and receiving ST Writer Elite for the first time. To un-ARC the manual, click on Prepare Disk at the main screen of the START menu program. Select "ST Writer Elite Manual," the document will un-ARC directly onto the destination disk you specify. The manual, in file STWMAN.ASC, is in ASCII format. You can read it by double-clicking on TYPE.PRG and choosing STWMAN.ASC from the file selector box. TYPE.PRG is a display program written by Sterling K. Webb which first appeared in the March 1989 issue of START.*)

### The Last Hurrah

I really do not anticipate any more updates to ST Writer. I have my medical practice, my sporting goods company and my own software company, and I would like to think of ST Writer as finished. Nothing is ever perfect, but I can't keep beating the thing to death. So I hereby resolve not to mess with it anymore. Nope, nothing can change my mind. *Nothing. Period. That's my final word!* Of course, those new resolutions on the TT might be a challenge. Hmmm, a word processor that works in all six resolutions... ■

***Dr. Bruce D. Noonan's wife has resumed talking to him—for now. As always, if you find any bugs, let Dr. Noonan know. He can be reached on CompuServe [72407,504] and Genie [B.Noonan].***

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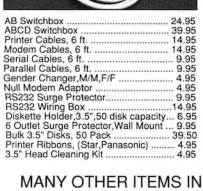

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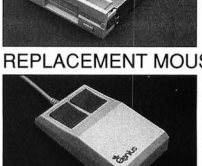

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# DESKTOP PUBLISHERS

Just a few years ago, there was really no such thing as desktop publishing. If you wanted to create a document that consisted of more than typewritten lines of copy, you went through a long, often costly process. You would write the copy, draw or obtain the pictures to accompany it and then design a blueprint (a layout sheet) to indicate how the elements should look after they were combined.

To get a finished product, you would take all of your work to a print shop. There the copy could be reproduced in the type size and style you desired, the artwork could be cropped, resized and then reproduced in printable form, and both elements could be laid out according to your design. Then your document would be printed.

These steps were both costly and time-consuming. And since someone else was doing the work, your control over the finished product and ability to make last-minute changes were limited.

Desktop publishing has changed all that. Powerful computers such as the ST let anyone single-handedly produce all sorts of documents such as posters or newsletters in as little as 15 minutes. And unless you want your creation printed on special paper or in great quantities, you won't even need to visit a print shop.

What you *will* need is software designed for DTP. As of this writing, there are four such programs for the ST: Calamus Desktop Publishing from ISD Marketing, Desktop Publisher ST from Timeworks, Fleet Street Publisher from Michtron and PageStream from Soft-Logik. (Editor's Note: *Actually, there are five DTP programs at this time: Atari's Deskset II rounds out the group. Though it wasn't released in time for this overview, it is available now. Watch for a review in a future issue of START.*)

In evaluating these programs, I can happily say that each one is capable of producing quality documents on an ST/Mega linked to a good dot-matrix or laser printer. But the programs vary greatly in terms of operation and features. The purpose of this article is to examine each program individually, describing its functions and capabilities along with some strengths and weaknesses.

## FLEET STREET PUBLISHER V. 2.1

**While Fleet Street Publisher lacks such capabilities as automatic text wraparound, it contains other welcome features. This screenshot shows a dialog box that makes radical text manipulation as simple as clicking the mouse.**

MichTron, one of the biggest software supporters of the ST, resurrected Fleet Street after the British company that exported the original version withdrew its support. Based on the performance of its version 2.1, MichTron made a wise move in reviving Fleet Street.

Fleet Street is a very capable performer whose assets include ease of use, good documentation, versatile text-editing functions, a nice collection of clip art and excellent print quality.

But it also lacks some sophisticated features that prevent it from being labeled a state-of-the-art DTP program. It will not support text flow from one page to another, can only import .IMG picture files and ASCII text files (although it can convert

# A START Overview

BY SCOTT WASSER

other word-processor text files to ASCII and three types of picture files to .IMG format) and it lacks the ability to wrap text around graphics.

By the time you read this, however, MichTron should have released Fleet Street Publisher version 3.0. According to MichTron's director of product support, George Miller, the new version will address those shortcomings and add some powerful new features.

Miller said the major revision will completely support multiple-page documents, feature fully automatic text runaround and directly import many different types of text and picture files. It will also justify text vertically and offer additional graphics drawing tools within the program.

Meanwhile, Fleet Street Publisher Version 2.1 will handle most basic DTP needs. Newcomers to DTP will especially appreciate the instruction manual. Its spiral-bound, 265 pages are well written, contain plenty of illustrated examples and are organized in a logical, easy-to-follow fashion.

For the most part, the program is straightforward and easy to learn. I particularly liked the use of selection boxes on the sub-menus. By pointing to an arrow and clicking on it with the mouse, you can scroll through and select from the entire range of options within a sub-menu.

Another Fleet Street Publisher characteristic I appreciate is its ability to manipulate text. The program has the capabilities of a pretty good word processor, including search-and-replace (but no spell checker). Blocks of text (as small as one letter and as large as an entire page) can be selected and then modified. You could, for example, have the first letter of a headline appear in a different font and size than the rest of the headline. Fleet Street Publisher will automatically adjust the spacing of the headline for you.

I also like the idea that Fleet Street Publisher comes complete with a library of 150 .IMG picture files covering a wide range of subjects. This helps compensate for its somewhat limited picture-importing capabilities and makes it easier for novice users to take full advantage of the power of DTP.

And speaking of power, the most recent version of Fleet Street Publisher available at review time came bundled with and configured to take advantage of a program called UltraScript from Imagen Corporation. UltraScript lets Fleet Street pages be printed in the high-quality PostScript file format.

Although Fleet Street Publisher requires 2MB of memory when used with UltraScript, its printouts were superb, even on a nine-pin dot-matrix printer. And don't worry if you don't have that much memory; Fleet Street Publisher will work with as little as 512K on a color or monochrome system.

**Desktop Publisher ST provides a good compromise between power and ease-of-use. Its text wraparound capbilities, for example, are somewhat limited, but implementing them is simple: just select the option from the menu and change the measurements to suit your needs.**

Anyone who has used any other Timeworks program on the ST knows that they are characterized by ease of use, flawless operation and enough power to handle most tasks. The Timeworks Desktop Publisher ST fits right into that mold.

Desktop Publisher ST comes with 200 pictures and nine sample publications. You can use the pictures as ▶

they are or modify them for your own documents. And while it's highly unlikely you would ever use the sample publications intact, you can easily modify their text and basic designs to create your own publications.

Timeworks claims the novice user can be at that stage within 60 minutes, thanks to the "Quick-Start Mini-Manual" included in the documentation. That documentation is unquestionably the clearest, easiest to follow and most complete of all the DTP programs mentioned in this article.

As impressive as the Mini-Manual were the clear installation instructions (at the front of the manual, where they belong), the numerous appendixes and an extensive index.

Desktop Publisher ST's command structure is very logical and intuitive. Every operation is performed within one of four modes built around frame, text, paragraph (copy block) and graphics creation and manipulation.

Using Desktop Publisher ST is as easy as it sounds. Since every element on a page must be contained by a frame, however, it is not quite as flexible as PageStream. This becomes particularly evident in the manipulation of text.

Although line and letter spacing can be adjusted manually or automatically to some extent, it's sometimes difficult to place a word exactly where you want it. That's because Desktop Publisher ST text is confined to frames and only the frames can actually be moved. If you create a frame just for a single word or line, that's no problem. But if you tend to enter words in blocks, as I do, the individual words or lines within the blocks cannot be manipulated (except with kerning and leading commands).

For all intents and purposes, it's also impossible to use different font styles or sizes within the same word or headline. You also can't use special effects such as text or graphics rotation, but Desktop Publisher ST does support automatic text runaround and multiple-page documents.

**Using Desktop Publisher ST is as easy as it sounds.**

It can also import many different types of ST text and graphics files. Simply click your mouse and the program will automatically import text (minus tabs and double line spacing) in ASCII or one of four popular ST word processor file formats (including Timeworks' own Word Writer ST) or art in one of five popular formats.

Simple artwork can actually be created and other artwork edited within Desktop Publisher ST, thanks to its graphics tools. You won't confuse this with a drawing program, however. The tools are somewhat limited and edited work cannot be saved as a picture file itself, but only as part of a Desktop Publisher Document or as a document itself (which limits its usefulness).

The documents created with Desktop Publisher ST can be printed on everything from a 9-pin dot matrix to a PostScript compatible laser printer, thanks to a wide range of printer drivers included in the program. The files themselves, however, cannot be saved in PostScript format. Print quality on my 9-pin Panasonic 1080i was quite good, although some of the GDOS fonts looked a bit jagged in certain sizes or styles.

The font sizes and styles at your command are limited by your printer type and computer memory. But Desktop Publisher ST will work very well on the most basic 520ST with color or monochrome monitor and single-sided disk drive.

A spokesperson for Timeworks said the company has no plans to offer a new version of Desktop Publisher ST.

There's no question that Calamus is the most powerful of the four DTP programs evaluated for this article. Quite simply, it contains more features and will perform more functions than the others. In fact, it could very well be the most powerful DTP program available for *any* popular computer system, not just the ST.

The questions a would-be buyer needs to ask are "Do I need this much power?" and "Am I willing to invest the time and effort required to take full advantage of it?"

**Calamus is the most powerful DTP program for the ST — or any machine for that matter.**

The minimum system requirements for Calamus, which comes on two double-sided disks, are a 1040ST and monochrome monitor. The recommended setup is a Mega 4 with hard drive and Atari SLM804 laser printer. I used it with a Mega 2, hard drive and 9-pin dot matrix printer and was completely satisfied with the results.

Printouts were particularly impressive. Calamus uses its own page description language, which can reportedly spew out a laser printed one-page document in just 30 seconds. Printouts are naturally much slower on a dot-matrix printer, but the quality of the type and line drawings was extraordinary. Calamus is not Postscript compatible and requires a special hardware interface for Linotronic output.

It will take some work, however, to get to the point where you're ready to make printouts. For the novice user, Calamus can best be described as intimidating. Upon booting it up, new users will find themselves staring at no less than 35 icons, five menus and five alphanumeric fields.

Few of the icons look familiar, so it's not difficult to be overwhelmed. Clicking on some of the icons will reveal even more icons that serve as sub-menus. If you point to an icon, an information field to the right of the menu bar will tell you what that icon represents. But the scope of the whole thing still boggles the mind.

For that reason, I couldn't classify the user interface in Calamus as intuitive. Some degree of planning is also required to get the most out of the program, since page composition is based on the creation of frames designated to hold specific elements.

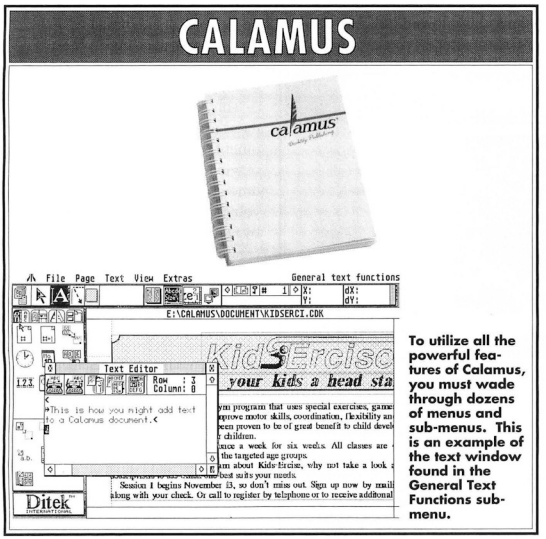
Once you become familiar with the program, however, it operates with an elegant smoothness. After spending a few hours with Calamus, I began to appreciate the flexibility and total control provided by its command hierarchy.

The program's documentation makes it more difficult than it should be to learn Calamus. The reference manual begins with a very technical description of pixels and vectors as they relate to the program. This could easily scare the average user away forever. The space would have been better used for a tutorial or index, neither of which were included in the reference manual I received. ISD claims that both are contained in the latest manual and will be sent free of charge to registered users.

Those users will find plenty of great features in Calamus. I was particularly impressed with the extent to which it lets users define their own macro keys for frequent operations, its ability to rotate text and flow it around objects, its total support of multiple-page documents and its ability to import text and picture files from a wide range of ST program formats. Another tremendous feature is the availability of multiple clipboards that can be used to perform all sorts of cut-and-paste functions.

While Calamus is already a very complete program, Potechin says it is only the foundation for an entire DTP system. A font-editing program with 10 new fonts and an outline and drawing package should already be available for use with Calamus. There's even a 300-page book available that offers hints and tips for getting the most out of Calamus. And an updated version of Calamus with around 200 new features is promised.

With a $299.95 list price, Calamus is not inexpensive by program standards. And it will extract a substantial price in time and effort to master Calamus and be able to take full advantage of its potential. For the ST user interested in serious DTP, the investment will be well worth it. ▶




**To utilize all the powerful features of Calamus, you must wade through dozens of menus and sub-menus. This is an example of the text window found in the General Text Functions sub-menu.**

## PageStream is less rigid than other DTP programs available for the ST

It hasn't been that long since PageStream producer Soft-Logik impressed the ST community with its first DTP program, Publishing Partner. Its eagerly awaited and much-anticipated sequel, PageStream, lives up to its advance billing.

PageStream is characterized by a very flexible and intuitive user interface, great versatility and tremendous power. Unfortunately, the version reviewed (1.52) is also characterized by some bugs and a tendency to bomb for no apparent reason. (Editor's Note: *PageStream version 1.8 is now available. Watch for a review in a future issue of START.*)

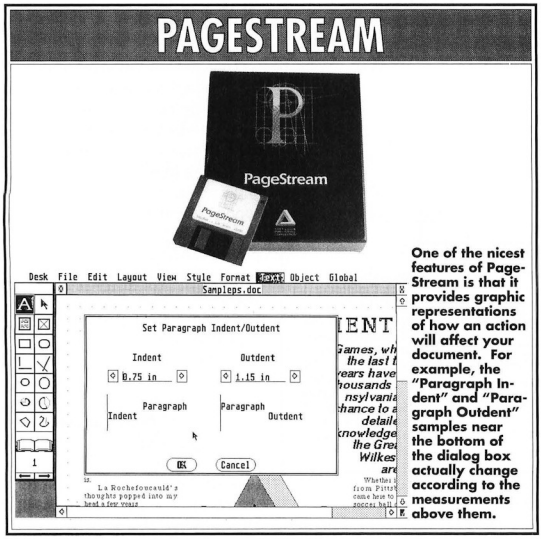
During the many hours I used the program, it bombed perhaps six times. There seemed to be no common denominator to the crashes, although all of them occurred while my Mega 2's blitter chip was activated. PageStream never crashed during the few hours I ran it without the blitter.

PageStream also displayed a few bugs that seemed to pop up whether the blitter was on or not. These bugs were mostly related to redraws of the work screen when it contained a document with a great deal of text. Chunks of text would sometimes disappear after the screen was redrawn to change view size. None of the few other quirks I encountered showed up more than once.

Despite these flaws, I love using PageStream. It is less rigid than other DTP programs available for the ST in that it doesn't require the user to first create frames or blocks to hold all of the various elements used in a document. Instead, PageStream automatically frames an element for you after it has been placed on a page.

For example, to type something into your document, just select the Text Mode and start typing at the cursor. PageStream will then define its own block around the text, letting it be moved, copied or rotated and enabling you to change the size, typeface and justification of the text within the block.

This capability gives PageStream more of a "run-and-gun" feel than the other DTP programs. You can kind of wing it while you create your document, designing the page layout as you go along. This makes PageStream by far the easiest program to use for creating documents filled with




**One of the nicest features of PageStream is that it provides graphic representations of how an action will affect your document. For example, the "Paragraph Indent" and "Paragraph Outdent" samples near the bottom of the dialog box actually change according to the measurements above them.**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graphics of various types and sizes.

PageStream can automatically create and size those graphics. It will let you create lines, boxes, rectangles, circles, ellipses and polygons. In fact, PageStream in many ways resembles a drawing program, albeit one with powerful text manipulation features added.

Many of the drop-down menu items contain sub-menus. One of the best features of PageStream is the way these sub-menus, which look more like dialog boxes, offer graphic examples of their effects. For example, one sub-menu features a polygon that changes shape to help you decide how many degrees you want to slant an object.

The ability to slant objects is just one of an impressive array of features offered by PageStream. Other powerful features include automatic word and line spacing and hyphenation, the ability to import a variety of picture types and word processor text files and the ability to automatically flow text around objects.

PageStream also offers a wide variety of print options, and — thanks to its own page description language — print quality is outstanding. Various printer drivers are included and multiple-page documents are supported. PageStream even lets documents be saved as PostScript-compatible files that can be printed out by high-quality typesetters.

All of these features are explained fairly well in the PageStream instruction manual. The manual contains three excellent tutorials, each one concentrating on different features of the program. If you do choose PageStream, be sure to save your work often until an updated version is released that eliminates version 1.52's tendency to crash. ■

***Scott Wasser is an editor at a daily newspaper in Wilkes-Barre, Pennsylvania. He wrote extensively for ST-Log magazine. This is his first article for START.***

**PRODUCTS MENTIONED**

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**Desktop Publisher ST**, $129.95. Timeworks, 444 Lake Cook Road, Deerfield, IL 60015.

**Fleet Street Publisher (version 2.0)**, $149.95. MichTron, 576 S. Telegraph, Pontiac, MI 48053, (313) 334-8729.

**PageStream**, $199.95. SoftLogik, 11131 South Towne Square, Suite F, St. Louis, MO 63123, (314) 894-8608.


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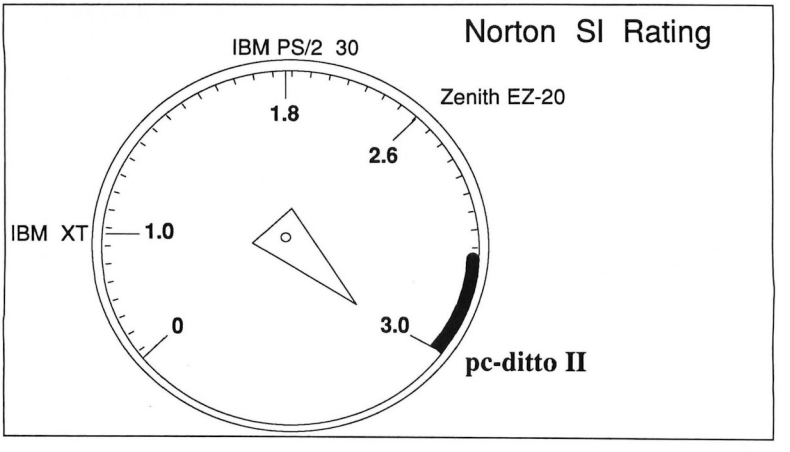


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# Mac and PC On The ST

BY DAVID PLOTKIN, START CONTRIBUTING EDITOR

## More on Apple's HYPERCARD

This month, we'll continue our exploration of Apple's Hypercard. As I mentioned last month, there are several levels of use with Hypercard. Each level gives you more options (and more power) and presents additional menus from which to choose.

### The Hypercard Levels

The first two levels of Hypercard, Typing and Browsing, aren't very interesting because all you can do is type information into fields that someone else set up.

The third level of Hypercard is called Painting. Recall that a Hypercard *stack* is made up of individual *cards*. The Painting level lets you modify how a card looks. Although the Paint menu appears small at first glance, there is quite a bit of power here, because each selection can be used several ways. The tools include such common MacPaint-type commands as rectangles, circles, brushes, lines, pencils (sets and erases points), area fill, graphic text, polygons, an airbrush and selection tools. As with most Mac applications, you can cut and paste items to the clipboard, then bring them in and use them in Hypercard.

The tools themselves can be modified. For example, with the graphic text, you can choose the size, font and any special effects you want. The airbrush can be adjusted for density and spread, while a large menu enables you to select from a variety of fill patterns. The weight of a line can be set, as well as the size and shape of the paint brush.

*Continued on page 44*

## MichTron Joins the PC Emulator Arena

## PC SPEED

PC Speed is a hardware-based PC emulator for the ST that works quite well and advances the state of PC emulation considerably. It comes with all you need to get going except MS-DOS, and can be installed by someone only moderately comfortable with a soldering iron.

### Installing PC Speed

The PC Speed package consists of board, two 64-pin sockets, a disk and a manual. To install it, you must open up your ST and remove the metal shield to gain access to the 68000 microprocessor. This is not especially difficult and is explained moderately well in the manual, but if you're uncomfortable "under the hood" you should have the job done by a qualified technician or dealer. (Editor's Note: *Please keep in mind that any modification you make on your ST may be a violation of the computer's warranty.*)

To actually install the board into the ST, you must solder one of the 64-pin sockets to the 68000, with each pin being soldered to a leg of the microprocessor. This is tricky and requires a steady hand and a fine-tipped soldering iron. You must also be careful not to overheat the 68000. Still, though this is complicated, you do not need to unsolder and remove the 68000 itself, an even tricker task.

Certain internal modifications (such as the JRI J .A.T.O. board) will not permit you to use PC Speed. According to notes posted on GENIE, PC Speed is also incompatible with Jim Allen's Turbo-16 accelerator board.

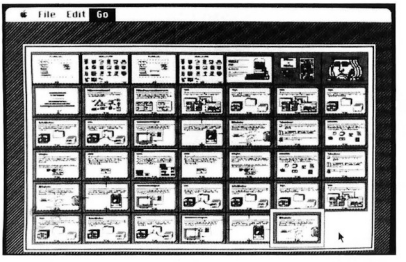
*Continued on page 46*

*Continued from page 43*

As mentioned earlier, each tool is available in several different varieties. For example, the line tool is used "as is" to draw lines in black. Hold down the Option ([Alternate] on the ST) key to draw the line in the selected fill pattern. The brush can be used as a paint brush or an eraser-brush. Another good example is the Rectangle tool. It draws rectangles (surprise!) with a black border. If you select "Draw Filled" from the menu, it will be filled with the selected pattern, and holding down the [Alternate] while dragging draws the border of the rectangle in the selected fill pattern. Thus, to draw a filled rectangle with no border, select "Draw Filled" and hold down [Alternate] while drawing.

The Fill tool is quite versatile as well. Not only can it fill shapes, but graphic text as well. Most of the tools have a "Draw Multiple" option so that multiple copies of the shape are created as you drag. The separation of these copies can be set and graphics can be shaped or stretched. As you can see, there is a lot of power for customizing your cards in the rather innocuous looking Paint menu.

It is important to realize is that each card has a background (which is the same for the whole stack) and a "card," or foreground, which is unique to that card. You can paint just the card, in which case your artwork will appear on that card *and not on any other* card in the stack. Or, you can select the background, in which case any modifications you make will affect every card in the stack. The "card" portion will take precedence over the background if the two overlap. Thus, you would want to set up the background graphics which are the same for all cards on the background, then switch to the individual card to make changes that affect just that card. This dichotomy between card and background holds for buttons and fields (see below).




**Hypercard features a searchable Help facility that outlines all its functions. This facility is itself a Hypercard stack. From the "home card" shown here, you can go directly to any stack by simply clicking on the appropriate icon.**

**The real power of Hypercard comes out in the Authoring level.**

### The Authoring Level

Although you can certainly make your cards look pretty using the Paint tools, the real power of Hypercard shows up when you engage the Authoring level. Here, you can place new fields and buttons on the card, and link those buttons to other cards or stacks.

As mentioned last issue, buttons are your way to retrieve other information. Clicking on the button tool in the menu gives you a default rectangular button called "New button." You can then resize it or select an entirely new "look" for your button from a stack called "Button Ideas" included with Hypercard. You can set many attributes of the button from a dialog box. You can change its name, decide whether to display the name and set its properties (transparent, opaque, shadowed, rectangular, check box, etc.). At any time you can modify a button, move it to another location or delete it entirely.

Buttons must be linked to something to be useful. They can be linked to another stack, a card within a stack or to a Hypertalk script. A good example of a button linked to a stack is when you create a new stack. To access the stack, create a button and place it in the Home stack, then link it to your new stack. Whenever you click on the button in the Home stack, it will open your new stack.

Linking a button to another card is useful to pull up additional information. Hypercard includes an example of a rolodex. The first card shows a series of lettered tabs (i.e., A, B, etc.). Click on one of these tabs to jump to the cards that contain information for people whose last names begin with those letters. To ensure that you will always get the first card for that letter, each letter of this supposedly single database is actually a different stack. The button is linked to that stack (rather than a specific card within the stack) so that it always jumps to the first card in the stack when you select the button. In fact, the first card (with the lettered tabs) is in a stack all by itself!

Linking a button to a Hypertalk script lets you build considerable

power into a Hypercard application. Hypertalk is a complete programming language. Thus, many things can happen when you click on a button linked to a script. Whole games have been written within the framework of Hypercard by using Hypertalk.

### Hypercard Fields

The last portion of the Authoring level are Fields. Fields are just what they sound like: fields for entering information. Creating a new field works just like creating a button — click on the Field tool and the field appears. You can resize it or move it or set various attributes. Among these are the size and font of anything you type into the field, whether lines will show, whether the text in the field will be locked and what size margins to set. As with buttons, you can set the field to be transparent, opaque, shadowed, etc.

You can even set a field to be a scrolling field — you can keep typing information into the field and it will scroll as you continue to type. A standard scroll bar appears to the right of the field, and you can access text anywhere in the field by clicking/dragging on the scroll bars. Fields are mini word processors and feature word wrap and basic edit features. Finally, fields can be linked to Hypertalk scripts, to expand the power of the application.

### Hypercard is Fun

As you can see, there is considerable power in Hypertalk even without programming, and its easy to see how people can be sucked into playing with it for hours at a time. It's been a long while since I've found anything that's as much fun to play with as Hypercard — and that includes games. ■

***David Plotkin is a a contributing editor for START. He lives in Walnut Creek, California.***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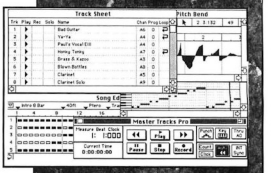

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*Continued from page 43*

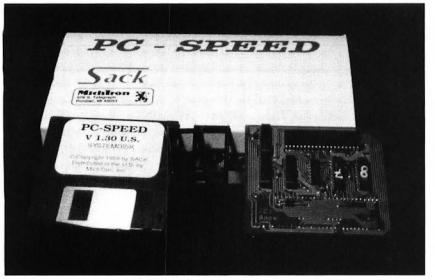
Once each pin of the socket is soldered in place, the PC Speed motherboard just plugs into the socket. Then you "button up" your ST and you're ready to go.

**The only emulator that works to my satisfaction is PC Speed.**

### Running PC Speed

To run PC Speed, all you need to do is double-click on the program PC_SPEED.PRG. At the prompt, insert a disk with MS-DOS (unless you have installed an autoboot from hard drive) and you'll soon be looking at the A> prompt. MS-DOS is not supplied with PC Speed, and a full package of the 3.3 version (the most recent before the ill-conceived version 4.0) costs about $70.

Also included on the disk is a program you can place in your AUTOEXEC.BAT file that will install a mouse driver for your ST mouse. Unfortunately, this driver only works with graphics programs and is not compatible with the text modes of many programs. However, you can purchase and install a real PC serial mouse which will work with programs that support such devices.




**PC Speed is Mictron's debut into the world of emulators.**

PC Speed also comes with a program for configuring the product. This program lets you modify the keyboard, floppy-/hard-drive configuration, screen and colors. The configuration program is a little rough around the edges, including untranslated phrases (from the German) and absolutely no documentation on what some of the choices mean.

For the floppy drive, you can set Floppy A to be either your internal or external drive. Of course, some machines don't have an internal drive, in which case you'll just have to try the two choices and figure out which drive is which — there's no information provided about what occurs in this case. Since I do have an internal drive, I wasn't able to see which way this worked.

Floppy B can be set up as None, 3.5 or 5.25. Again, it's not clear whether the selection for 5.25 will set the step rate down to what those types of drives can handle, or whether you'll have to use the software that 5.25-inch drives normally come with to achieve this effect.

Hard drives can be set up as None, Yes or HD-BOOT. If you select "Yes," your hard drive will be available in the PC environment. Interestingly, no hard-drive driver is provided with PC Speed. PC Speed uses your own hard-drive driver, which should work better.

If you select HD-BOOT, PC Speed will attempt to load MS-DOS from the hard drive. For this to work, you must reformat the partition you want to use to load MS-DOS as a system disk under DOS. The manual leads you through the process for this. Be warned that doing this will erase anything on that partition. (The manual does *not* warn you of this!)

The configuration for the screen lets you set up what video card you want PC Speed to emulate. The default is CGA, which is a good choice because most programs run under CGA. Other choices include Hercules, a higher resolution that allows monochrome graphics; Hyper Herc, an enhanced Hercules mode that is not supported by much software; and two I don't recognize: Olivetti and Grafikcard.

PC Speed also lets you set the fonts used one of three ways: Both, Light or Dark. Again, the lack of documentation makes this feature less useful. Configuration for colors lets you choose from the following modes: 40-character with four colors, Graphic or SM-124.

Note that you can set a mode that your monitor can't support; that is, you can select a mode that shows color even if you're using a monochrome monitor. In Graphic and 40-character modes, you can display all 16 colors that CGA is capable of. In 80-character mode, you can only display four colors, so you must assign the 16 colors of CGA to the four colors on the ST. Set each color by using the left and right arrows to select R, G or B, then using the up and down arrows to vary the amount of that color you want. Again, this is not documented in the manual. There is also a bug that prevents you from viewing the amount of green or blue that you've selected because

another character on the screen obliterates the number.

### How It Works

The proof of the pudding, of course, is how well PC Speed works as a PC emulator and I am happy to report that it works quite well. It ran every PC program I tried, with one exception. While mine is not an exhaustive list, it bodes well because it includes such tests of PC compatibility as Lotus 1-2-3 and Microsoft's Flight Simulator. It also ran the Norton SI program, returning a respectable value of 4, or four times as fast as a standard IBM XT. Compare this to the advertised value of 3 for pcditto II which is not available as of this writing (early December 1989). The high SI rating is possible because PC Speed uses a NEC V-30 that runs at 8 MHz.

**The manual does not warn you that formatting the hard drive will erase the information thereon.**

PC Speed does not support a math coprocessor at this time, giving the edge in that department to Supercharger, but it does work well with a hard drive — something I can't say for Supercharger.

The program that would not run on PC Speed is Prodigy, the driver software for the new Prodigy bulletin board service from IBM and Sears. (Prodigy also doesn't work under pcditto.)

### And then There's the Manual

The manual for PC Speed consists of 13 pages including the title page and two entire pages of license and disclaimers. Beyond that, there are the instructions for installation and some information on customizing the program — setting up the hard drive and an 80-track floppy. The language is stilted and some of the manual is confusingly written. Further, the instructions for setting up the 80-track floppy, while they will work, allow access to only one floppy (for a better way, see my "Mac and PC on the ST" column in the August 1989 issue of START). The manual does not warn you that formatting the hard drive will erase the information thereon, warning you instead to "Pay Attention doing any format operations, especially on hard disks!!!"

The photographs that purport to show the internals of the machine for installation are photocopied and therefore worthless. Further, there is no information on using the configuration program and what the different options mean. You can eventually figure out most of it, but I was never clear on what some of the options did. Michtron manuals have unfortunately tended to be extremely poor and for $400 the user deserves better than this inadequate attempt.

### Summary

At the current time, the only hardware PC emulator that works to my satisfaction is Michtron's PC Speed. It's fast, compatible, handles hard drives a nd is available now. It's more expensive than the projected price of other emulators, but until they become available in bug-free incarnations, PC Speed is the only game in town. The incomplete manual notwithstanding, this emulator works and works well. ■

***David Plotkin is a contributing editor for START and writes our "Mac and PC on the ST" column on a regular basis.***

**PRODUCTS MENTIONED**

**PC Speed**, $399.95.
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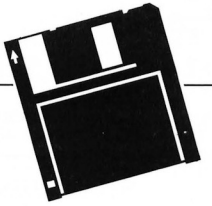

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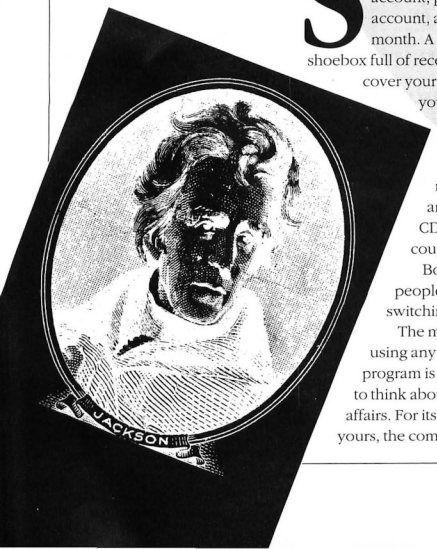
# Abandon Your Shoebox

BY STEPHEN G. ROQUEMORE

***An essay describing the virtues of computer-based home accounting software.***




Some of you have simple finances — one checking account, possibly a savings account, a few bills every month. A checkbook and a shoebox full of receipts seem to cover your needs. Some of you have a complex financial structure, including retirement plans, insurance policies and CDs. You need a couple of shoeboxes.

Both types of people can benefit by switching to software.

The major advantage of using any home-accounting program is that it forces you to think about your financial affairs. For its own benefit, and yours, the computer insists that you structure your budget and monitor your spending. You manage your money, instead of your money managing you.

A sophisticated home-accounting program tracks your cash flow, graphing income vs. expenses. It gives you instant access to your net worth, which is useful when applying for a loan and lets you analyze loans. You can compare savings plans in a similar fashion. When tax time rolls around you have everything you need collected in one place. I used to spend several days doing my taxes by hand; now I whip out both Federal and State returns in about an hour's time!

After a while you'll notice that at every moment you have a solid feel for the state of your finances. You now control an important part of your life. Keep the shoebox if you want, but fill it with footwear. ■

# PHA$AR

*Keep tabs on your budget with the files*

***Tom Marks' PHA$AR is a friendly, GEM-based home and small-business accounting system that will make your financial life easier. It is also one of the most popular money management programs ever developed for the ST and START is pleased to present it on this month's disk. PHA$AR runs on any ST/Mega color or monochrome system.***

The following documentation was condensed from the original PHA$AR version 3.0 manual and is intended to get you started in this powerful program. For an in-depth tour of PHA$AR's many capabilities, read "Be a Power PHA$AR User" elsewhere in this issue. And if you can, you should acquire the complete manual.

### Getting Started

To run PHA$AR, boot this month's START disk; the START menu program runs automatically. At the main screen, click on Prepare, then select "PHA$AR version 3.0." The program will un-ARC directly onto the destination disk you specify. To access the PHA$AR datafiles, return to the START menu program and click on "PHA$AR Datafiles." The files will un-ARC directly onto the destination disk you specify. Be sure that the following datafiles are in the same folder:

| | |
|---|---|
| PHASAR.NAM | PHASAR.OCC |
| PHASAR.REG | PHASAR1.HLP |
| PHASAR2.HLP | PHASAR3.HLP |
| PHASAR4.HLP | PHASAR5.HLP |
| PHASAR6.HLP | PHASAR7.HLP |

# V. 3.0

# The Professional Home Accounting System and Register

PROGRAM BY TOM MARKS
ARTICLE BY STEPHEN G. ROQUEMORE

*PHASAR.ARC and PH_DATA.ARC on Side 1 of your START disk.*

With so many files, PHA$AR obviously takes up a lot of space, so you may have to separate the files onto different disks (unless, of course, you have a hard drive). However you configure your system, make sure that PHASAR.PRG, PHASAR.CFG and PHASAR.REG are in the same folder. PHA$AR will run on 512K, but a 1MB system is recommended.

## Accounting for Your Accounts

Before you run the program, you need to plan and organize your financial records. Collect all of your bank statements, credit card statements, loan payment receipts, etc. You need all of this to decide what you'll enter into PHA$AR for Income and expense categories and for accounts. PHA$AR allows 97 expense categories, 29 income categories and 39 accounts. It supplies miscellaneous income and expense categories and a cash account with associated net cash and total cash expense categories for you.

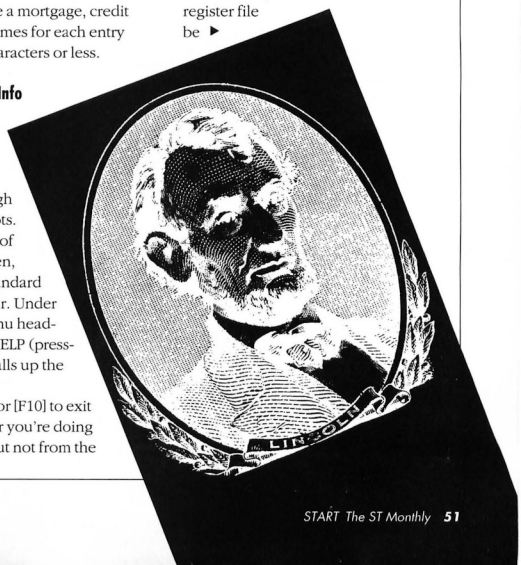
Write down all of the income categories and all the expense categories you'll need. Then write down all of the accounts you'll need. Make one for each checking account, savings account and any other type of account that can receive or disburse money. Be sure you have the last confirmed balance for each of these items. Separate them into "assets" and "liabilities." (Assets are those accounts that are of value, like your house, car, boat, checking and savings accounts, etc. Liabilities are those accounts to which you make payments, like a mortgage, credit cards, etc.) Names for each entry must be 10 characters or less.

## Some General Info

PHA$AR contains all the online help you'll need to get you through any rough spots. Along the top of the main screen, you'll see a standard GEM menu bar. Under any of the menu headings, click on HELP (pressing [F1] also calls up the help menu).

Press [Esc] or [F10] to exit from whatever you're doing in PHA$AR, but not from the program. [Return] or the left mouse button will do the same in most cases.

Before you run PHA$AR, make sure that the current time and date are correctly set, via the Control Panel or whatever means you normally use. PHA$AR uses this to determine the date of your transactions for a session and if it isn't correct, then neither will your register file be ▶



correct. PHA$AR provides an option in the File menu to set the date, but this is only for convenience in entering transactions later than the current date.

When you return to the main menu, always save the register file. Also, you can *un*delete a transaction by placing the cursor on the line where the transaction was displayed and pressing [Insert]. This must be done *before* exiting the function.

### Setting Up PHA$AR

Run PHA$AR; it may present a dialog box asking where the PHA$AR.REG file is. If so, type in the correct location, including the drive ID and the folder name if necessary.

At the main menu, select Set User Preferences under Setup. Here you enter the choices you want PHA$AR to use whenever you run it.

You'll then be asked to decide if you want PHA$AR to force a unique category name when entering transactions. I recommend you select Yes, because it forces you to be specific about the account or category name you enter and reduces errors. Select No for Automatic Occasions. Select Yes for Verify Exit. Accept the default for now on Plotting Symbol and Standard Page. Enter the correct drive and path names for each of the file locations. Select Printer for Print Destination. Select the printer type that is consistent with your printer.

You may select Custom Printer which lets you specify six items regarding your printer, according to the type you selected. For now, just select Dot Matrix or Daisy-Wheel. Now press [Esc] and click on Yes to save the values. Click on No when asked to test the printer.

You now have a PHA$AR.CFG file, which PHA$AR will use every time you run the program. You may change any of the values at any time.

Now select Create New Register File under Setup. (Be sure you have a separate backup of the PHA$AR.REG file that came with the program! This file contains the tutorial data, and you may want to use it later on.) You'll be asked whether you want a Calendar Year or Fiscal Year for the file. If you choose Fiscal Year, the "year" is the calendar year in which the fiscal year ends.

Next, select Set Up Accounts under Setup. It is here that you'll enter all the account names and balances you planned out earlier. First, tell PHA$AR how many accounts you want to allow for; if you have mapped out, say, 20, then allow for 30. You can always change this number later. This also applies to income and expense categories. As you enter asset accounts, remember to enter the balances as *positive* numbers, and the balances for lia-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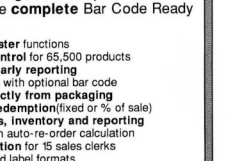

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bility accounts as *negative* numbers.

Enter all the asset accounts; your checking and savings accounts should probably be first in the list. Then leave a few blank entries before entering all of the liability accounts. This makes the info more readable on screen reports. For each account, enter the date of the last *confirmed* balance.

When you've finished all the above, press [Esc] to return to the Main Menu. Press [Control]-[S] to save the register file.

Now return to the Setup Menu and select Set Up Incomes to enter your income categories. Your first entries should be your job(s); then any other sources of income you may have. At the end of the list, enter any income source that is non-taxable.

When you've finished, save the register file as you did for accounts; then select Set Up Expenses in the Setup menu. Proceed as you did for incomes. Group related expense categories together, e.g., paycheck deduction categories for each job, basic household expenses, etc. This makes your screen reports easier to read. Note: once you have entered a transaction for an account or category you *cannot* change its name.

Now return to the Main Menu and save the register file as before. Press [Control]-[A] to display your account structure; study it carefully for any mistakes or changes you want to make and jot them down. Follow the prompts. When you're finished, press [Control]-[C] to display your expense and income structure; you'll want to see the "actual" so just press [Return] at the prompt; do the same as you did for accounts, jotting down any changes you wish to make. Follow the prompts. When you return to the Main Menu, select whichever Setup sub-menu you wish to make your changes in.

(To change the order of entries, place the cursor on the number of the item you wish to be first then type 1 and press [Return]. The item will now be first on the list. You may rearrange the list any way you like using this method; if you want the 27th item to be 26th, just place the cursor on 27 and type 26 and press [Return]. If you wish to change names and/or balances, just place the cursor on the field and enter the new name or balance and press [Return].)

You have now initialized the basic information PHA$AR needs to properly process your transactions.

### Save Your Work!

Whenever you end a PHA$AR session, exit the program and copy the PHA$AR.OCC and PHA$AR.NAM files to your backup disk. Also, of course, copy the PHA$AR.CFG file if you changed any preferences and the PHA$AR.REG file if you entered any transactions or did anything that affects your account/category structure.

## THE MAIN MENU

### Desk

Lets you access whatever desk accessories you've installed; also provides PHA$AR copyright information. A word of warning: PHA$AR does not work properly with Multi-Desk from Codehead Software — it locks up the program.

### File

**Help**: Click here for special online help for the File menu only.

**Change System Date**: Lets you change the date of your transactions. Particularly useful if you enter a large amount of transactions with dates earlier than today's date. Isn't necessary if you have a clock card.

**Save Register File**: Saves work file to specified destination disk. Keyboard equivalent is [Control]-[S]. Periodically save the register file so that a random power glitch or computer error doesn't destroy your data. ▶


## GET YOUR PHA$AR 3.0 MANUAL

Because PHA$AR is packed with so many powerful features, to really get the most out of the program (particularly the tax module) you should have this manual. The PHA$AR documentation gives you over 125 pages of well organized and clearly written instructions, including a full index, a step by step tutorial and a quick start guide.

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**Validate Register File**: Reads all transactions in a file and rebuilds the current balances of all accounts and categories from that data. Also, resets the account status according to whether or not it has been reconciled. Warning: Validate Register File is very important but dangerous! Do not use it unless you have a current backup of your register file! Choose this option only if a major computer or power glitch has trashed your balances.

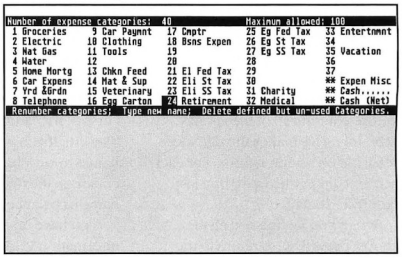
**Quit**: Click here to return to the ST Desktop. Keyboard equivalent is [Control]-[Q].

### Transactions

**Help**: Click here for special online help for the Transactions menu only.

**Enter New Transactions**: Select this option to display a list of your accounts and their current balances, in the top half; and a header line that describes each section of a transaction and a prompt for which account to use on the the bottom half. The keyboard equivalent is [Control]-[E].

**PHA$AR lets you organize your assets and liabilities by setting them up into Income and Expense categories.**




After the first transaction, PHA$AR will use the account you select as the default. Select the account and press [Return]. The account name now appears above the column labeled Account.

The Date field defaults to current date. Press [Return] to accept the default or type the date you wish. You can spell out the month and day, or use the MM/DD/YY or DD/MM/YY formats, depending on your specification in User Preferences. This entry is now displayed under the header line for date. If you make a mistake, press [Tab] at the appropriate field.

In the Payee field, type in the recipient of the payment; if you type in the name or number of a PHA$AR account, the program thinks you want

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a transfer from this account to the one named in the payee field. This is OK if you're making a payment to a liability account; otherwise, if it's for an expense account, make sure the spelling is different enough that PHA$AR won't think it's a transfer.

The next field is either the expense category or the income category, depending on whether you're depositing or paying out funds. Press [Control]-[L] to get a list of choices, then enter the name or number of the category. If the category doesn't exist, PHA$AR will ask you if you want to create it now. If yes, you'll be taken to the setup screen and allowed to define the category. Then you will be returned to complete your transaction entry.

If you're transferring between accounts, this field is supplied by PHA$AR. On transfers, when you finish entering the fields, the transaction is displayed in the list above as a "XFER out"; then, PHA$AR displays an automatically-generated "XFER in" transaction for the receiving account, with the cursor placed in its comment field. Press [Return] to complete the transfer.

The next field is ChkNum. Enter the actual check number or type a blank, or type a zero (0) if you want PHA$AR to quit supplying numbers for this account. Select the zero option if the account is a credit card or savings account which doesn't require check numbers. Now enter the actual amount.

The last field is called Comment. Here you may enter any text you like or nothing at all. Press [Return]. This field can be printed on checks if you desire.

The PHA$AR cash account is shown at the bottom of the account list in the top half of the screen. It also gives you two expense categories for cash. Press [Control]-[L] to call up a list of expense categories. The only one shown will be Cash... This is a special kind of expense category; think of it as *total cash*. The one that isn't shown here, think of as *net cash*. Total cash is what you started out with; net cash is what's left after all your recorded transactions from the cash account.

To issue a check that covers more than one expense category or to make a deposit that covers more than one income category, type "multi" or "split" at the expense or income prompt. Continue entering the transaction normally. Enter the correct full amount and any comment you wish. When you press [Return], PHA$AR generates a second transaction line for you, with the cursor positioned in the expense (or income) field. Enter each category and its partial amount. Do this until each required expense (or income) category required has been entered. ▶


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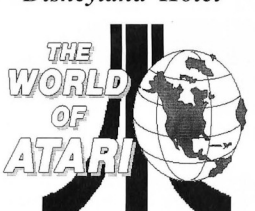


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cally highlighted. Make your choice; the first page, Expenses, is displayed. If you have more than 30 expense categories, the rest will be on subsequent screen(s). Follow the prompts for the next screen. When you're finished with expenses, the income categories are displayed. At the bottom, a net-cash-flow calculation is shown for the period shown. Follow the prompts to return to the Main Menu. The keyboard equivalent for this option is [Control]-[C].

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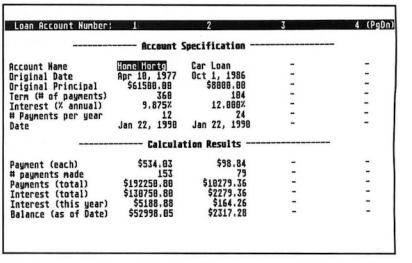

```
Loan Account Number:    1              2              3              4 (PgDn)
                        ---------- Account Specification ----------
Account Name            Home Mortg     Car Loan       -              -
Original Date           Apr 10, 1977   Oct 1, 1986    -              -
Original Principal      $61500.00      $8000.00       -              -
Term (# of payments)    360            104            -              -
Interest (% annual)     9.875%         12.000%        -              -
# Payments per year     12             24             -              -
Date                    Jan 22, 1990   Jan 22, 1990   -              -
                        ---------- Calculation Results ----------
Payment (each)          $534.03        $98.84         -              -
# payments made         153            79             -              -
Payments (total)        $192250.80     $10279.36      -              -
Interest (total)        $130750.80     $2279.36       -              -
Interest (this year)    $5188.88       $164.26        -              -
Balance (as of Date)    $52998.85      $2317.28       -              -
```

**Print Account Summary**: Lets you print out data from the View Account Summary option.

**Print Category Summary**: Prints the same data from the View Category Summary option. Note that it always prints all 12 months' worth of data, regardless of the current month.

**Sort/Unsort Categories**: Sort the categories for display or printing in one of three ways: Ascending by Name, Ascending by Amount or Descending by Amount. Select whichever you desire, then select the type of data and the month or total. After the sort is completed, when you select View Category Summary, the data will be displayed, sorted as you requested. Select Original Order to return the categories to their original order.

**Net Worth**: Sets up a tailored Net Worth Statement for your financial structure. It provides up to 40 lines of asset information and up to 40 lines of liability information, plus a final line showing the current Net Worth. When you select this option you are presented with a box letting you choose to Edit Assets, Edit Liabilities, View Statement, Print Statement, Clear Statement or Exit. Exit returns you to the Main Menu.


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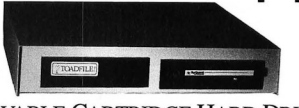

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## Analysis

**Help**: Click here for special online help for the Analysis option only.

**View/Edit Budget**: Keyboard equivalent is [Control]-[B]. Sets up budgets for any or all of your categories. You're presented with a line asking which category you want. Then a screen is presented to let you enter budget amounts by month or for all months. Follow the prompts. When finished, press [Esc] to return to the "which category" prompt. If you select nothing here, the line is automatically filled with the next category name. Press [Esc] to return to the Main Menu.

**Plot Trend vs. Budget**: Displays graphs of your category data. Keyboard equivalent is [Control]-[P]. You're asked which category to plot; enter the appropriate name. Here, the List command also offers several "composite" categories from which to choose, which allows comparative graphs to be drawn. If you want to print the graph, press [Control]-[M]. Follow the prompts to see a table of data displayed or press [Esc] to return to the "which category" prompt. Another [Esc] will return you to the Main Menu.

**Loan Analysis** and **Savings Analysis** work much the same way. They let you define up to eight loans or savings accounts to analyze the different sets of terms. Loan Analysis is also useful at tax time to estimate the total interest paid on a loan. When you select Loan Analysis, you are presented with a screen allowing room for four columns of loan data; press [Shift]-[Down-Arrow] key to scroll to the next page of four loans.

Enter the account name ( *not* an account you have defined to PHA$AR; it's just a name for this column of data), the origination date, original principal, number of payments, the interest rate, number of payments per year and the termination date for which you want the loan calculated. PHA$AR will then calculate and display the amount of the required payment, number of payments made, total of payments, total of interest paid, the interest paid this year and the balance of the loan as of the date you entered. Note: you must enter a name or PHA$AR won't display the calculation results.

Savings Analysis works the same way except that you give the amount of payments you plan to make instead of the number of payments.

## Setup

**Help**: Click here for special online help for the Setup menu only.

**Set User Preferences** ([Control]-[U]), **Setup Accounts**, **Setup Expenses**, ▶


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409 Uniterm 2.0d modem prg.
413 Recipe program (COLOR).
446 ST Writer Elite 3.4.
520 Chess, Boggle, Cribbage,...
522 ST Vegas (COLOR).
524 PacMan, Midway (COLOR).
528 Jumpster (QBert), Monopoly, HiQ, Taipan game (COLOR).
544 Deluxe Fontmaster (MONO).
550 Opus 2.2 Spreadsheet.(DBL/MEG).
551 BSTAT 2.05 Statistics (DBL/MEG).
570 Risk (MONO)
577 James the Butler ACC, VKiller, QuickMenu, other utilities...
578 DCopy 3.2 and DCopy Shell,...
579 Utilities: Pack, Nullfill, Rattrap, Mouse Accel, Screen savers,...
581 Super Utilities: LG File Selector, Pinhead, Disk Cache, Newbell, ...
583 ARC 5.21B, ArcShell 2.0, Arcit.
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Each time PHA$AR positions the cursor on the amount field, it displays a default amount which is the total amount minus the sum of the partials entered so far. When you reach the last partial entry, the amount shown should be the correct partial amount for the last entry you wish to make. These partial entries do not affect your account balance and are automatically confirmed, so they never show up when reconciling accounts.

**Use Standard Transactions**: Lets you to call up one of various transactions you've set up. It presents the list which you then modify and/or delete the entries you wish to change, supply correct amounts if different than the supplied value, specify correct check numbers. When you've made all the appropriate changes, press [Esc]. A box of choices is then presented. Accept the default to record them on disk.

**Edit Standard Transactions**: Lets you set up up to 17 groups of up to 20 transactions which can be called up by the Use Standard Transaction function. A great time-saver if you have a fair amount of repetitive transactions you enter regularly.

**View/Edit Transactions**: Lets you display a list of transactions based on specified selection criteria. The keyboard equivalent is [Control]-[V]. A screen is displayed for you to enter your criteria. Specify All or a list of one or more accounts, by name or number. Then specify the same for income and expense categories; you may also specify None for either. Then specify All or the payee string to search for, followed by the start and end dates to include in the search. Finally, specify whether or not to print the results.

**Confirm With Statement**: Choose this option to periodically reconcile all of your accounts. First, enter the name or number of the account to reconcile. The beginning balance is supplied by PHA$AR from the last confirmed balance. You then supply the ending date and balance from your bank statement (or use whatever date is appropriate for the other accounts); you can usually accept the PHA$AR-supplied default for Confirmation string. Now, strike any key. PHA$AR displays messages to inform you of the search; then a screen of unconfirmed transactions is displayed. Move the cursor to the Confirm column and press [Return] for each transaction that appears on your statement. If one doesn't appear, use the down-arrow key to space over it. If there is more than one page, press [Shift]-[Down-Arrow] to scroll to the next page and continue confirming transactions. When a message is displayed that the balances match, press [Esc] and


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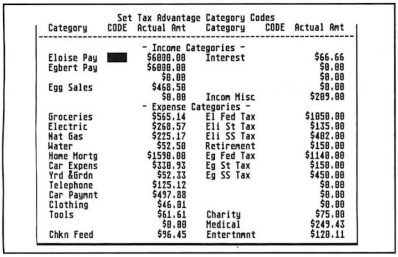

Set Tax Advantage Category Codes

| Category | CODE | Actual Amt | Category | CODE | Actual Amt |
|---|---|---|---|---|---|
| | | - Income Categories - | | | |
| Eloise Pay | | $6000.00 | Interest | | $66.66 |
| Egbert Pay | | $6000.00 | | | $0.00 |
| | | $0.00 | | | $0.00 |
| Egg Sales | | $466.50 | | | $0.00 |
| | | $0.00 | Incom Misc | | $295.00 |
| | | - Expense Categories - | | | |
| Groceries | | $565.14 | El Fed Tax | | $1050.00 |
| Electric | | $268.57 | Eli St Tax | | $135.00 |
| Nat Gas | | $225.17 | Eli SS Tax | | $402.00 |
| Water | | $52.50 | Retirement | | $150.00 |
| Home Mortg | | $1530.00 | Eg Fed Tax | | $1140.00 |
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**PHA$AR's Tax Advantage Statement lets you calculate your total net worth based on your assets and liabilities.**

follow the prompts.

If you run out of transactions and the balances are incorrect, you are given six choices to remedy the situation: Re-examine Transactions, Enter Missing Transactions, Change Ending Balance, Accept Statement Balance, Sort Transactions or Revert To Original State. Select the appropriate option.

If you select Revert To Original State, there are several consequences. First, PHA$AR will unconfirm all transactions you just confirmed; all other edits you performed will be left unchanged. The last confirmed balance and date will be reinstated. Newly entered transactions will be left intact but unconfirmed; finally, all transactions you marked for deletion will be deleted.

## Reports

**Help**: Click here for special online help for the Reports menu only.

**View Account Summary**: Displays a screen listing each account, its last confirmed balance and date, last unconfirmed balance and date and how many debit and credit transactions and their totals are in the file for that account. They represent the current unconfirmed transactions for that account. If there are more than 20, the rest are displayed when you strike any key to go to the next screen. At the end, the total number of unconfirmed balances is shown. The keyboard equivalent is [Control]-[A].

**View Category Summary**: Produces a two-screen display of your expense and income category data. You're presented with a box that lets you choose Actual, Budget or Difference. Select one with the mouse or cursor key; you're then presented with a box letting you choose which month or a composite total-to-date display; the current month will be automati- ▶

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**Setup Incomes**: See page 52 under "Setting Up PHA$AR."

**Set Up Check Printing**: Lets you configure PHA$AR to print your checks instead of you writing them manually. I recommend you ignore this option unless you use preprinted check forms; for a normal household, it just isn't worth it.

**New Year Carry Over**: Re-initializes your register file and places any uncleared transactions in month "zero" to make your next reconciliation easy. You will be asked if you wish to carry over any Standard Transaction pages you may have; choose whichever you wish. If you carry them over, you won't have to redo them. If you don't, you will have to redo all of them; if you plan on a major restructuring of your accounts and/or categories, this is the way to go.

**PHA$AR allows for up to 500 transactions per month**

**Create New Register File**: Use this option to start a new file from scratch for the next year (covered above under "Setting Up PHA$AR"). Be sure you have a separate backup of the files for the year just ending!

**Tax Advantage Codes**: Choose this only if you use the Tax Advantage program to do your taxes. The Tax Advantage manual contains the codes you need to enter here. If you use it, PHA$AR displays a screen with your income and expense categories listed; just enter the correct code for each category you want to track for tax processing. Any category you do not wish to track, leave blank. Just move the cursor past it; if you enter anything but the correct three-digit code, even backspacing will cause The Tax Advantage to flag that category as invalid and you'll have to re-enter the total to The Tax Advantage manually. This is also true if you enter an incorrect number.

### Lists

**Help**: Click here for special online help for the Lists menu only.

**View/Edit Names & Addresses**: Lets you view or edit any names, addresses and telephone numbers that you've entered under View/Edit

Names & Addresses. You are asked which name to search for; enter at least two characters of the name. The program then displays the entry in a template. If there is no match, it will display up to three near choices. You may then use [Shift]-[Up-Arrow] or [Shift]-[Down-Arrow] to scroll through the list. If you wish to enter a new name, press [Insert] at the search-for prompt and the template will be displayed to enter the data. The keyboard equivalent is [Control]-[N].

Now the template for the remaining data is displayed. Enter telephone numbers on the first line. Enter up to three phone numbers on this line. The remaining four lines are for address information and any other data you wish to add. Edit existing entries the same way; type over the data and press [Return]. As you enter each line, press [Return] to move to the next line. If you wish to delete a line, place the cursor on the desired line and press [Delete]. You can move the cursor by using the arrow keys. When you are finished entering or editing data, press [Esc] to return to the main menu.

**Print Names & Addresses**: PHA$AR prints all five lines of data you entered for each name. If you print checks with PHA$AR, it will look in this file for any name and address information you want printed on the checks or you can provide it via the keyboard.

**Print Telephone Directory**: Prints all stored phone numbers. PHA$AR looks for the phone numbers in the first line; it will print whatever you have entered there, however.

**View/Edit Special Occasions**: PHA$AR can store up to 250 dates and a one-line description for each. It only pays attention to the day and month, so it's geared toward annual events. Though it's primarily for birthdays and the like, you can add any special event or appointment you wish. Press [Esc] to return to the Main Menu. ■

***PHA$AR guru Stephen Roquemore lives in Scottsdale, Arizona.***

## PHA$AR 4.0 UPGRADE OFFER

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# Phasar User

BY STEPHEN G. ROQUEMORE

To the uninitiated, PHA$AR can be complicated and overwhelming. But it's really not that hard to use its many powerful features. In this article, I'll lead you through some of them so you can quickly become a "power PHA$AR user."

## The Cash Flow Statement

To help you control your cash flow, you need a very accurate "Cash Flow Statement" (also known as an "Income vs. Expenses Report"). The proper use of this function in PHA$AR will let you keep very tight control of your money and will ease the burden at tax time, too.

First, use the Setup Menu to establish all of your expense categories. Here you need to be specific. Set up as many as you need. If you have a situation where one expense can cover tax-related and non-tax-related expenditures, create two expense categories. Be sure to create expense categories for your paycheck deductions for Federal and State taxes and FICA. Also, don't forget any local income taxes. Do this for each source of income you have (i.e., if your spouse also works).

Next, set up separate income categories for each job. Also set up "No Cash Flow" income and expense categories (more about this feature later). Set up as many income categories as you need and avoid having to put anything in Misc. Income (or Misc. Expense). The miscellaneous categories are supplied by PHA$AR.

Now go to Set Up Accounts. Create an asset account called "Deductions" or some similar name you'll immediately recognize as different from all of your other asset and liability accounts. Set the beginning balance to zero. This will be the account you always use to record your paycheck deposits. Also set up another dummy asset account with a zero balance. Call it something like "Adjustment."

Be sure to create an asset account for all your legitimate assets: house, cars, computers, and all the other things you own that could be sold for cash. Also set up asset accounts for each of your major credit cards and set the balance to whatever their credit limit is. Be sure the names are not the same as the names you'll use for these credit cards when you set up your liability accounts for each. Of course, you need to set up asset accounts for each of your checking and savings accounts, too.

Now set up a liability account for every place you make a payment to. This includes mortgages, loans, credit card payments, gasoline and store cards (if they work like a VISA), personal debts, etc. If you're renting furniture to own, set up a liability for this and set the beginning balance (as a negative number) equal to the sum of payments required. If the payment includes an insurance fee or other amount not related to the actual cost of renting the item, then do not include that amount in the sum of payments.

(Remember: when setting up liabilities, the beginning amounts are always negative. The beginning balances should be the amount owed as of this minute.)

After you do all of the above, review the accounts and income and expense categories to make sure you have covered everything and that the balances are as correct as you can make them. Be sure you have also set up Expense Categories for all your payments to liability items. When you're satisfied that you have covered all the bases, exit to the main screen and Save Register File by pressing [Control]-[S] or selecting it from the File Menu.

## The Net Worth Statement

You now have all the pieces in place to produce an accurate Cash Flow Report. But what of the Net Worth Statement?

At the main menu, click on Net Worth and you'll be presented with a submenu. Choose Edit Assets. On each line (up to 40) enter a name for ▶

the asset you want to show. Include your bank accounts, CDs — anything you've set up an asset account for. In the next column, type in the account name. This will automatically use whatever the current balance is whenever you View or Print the Net Worth statement.

Here's a tip: when entering the descriptions of each account, also type in as part of the description the account number for that account. This will serve as a very handy reminder later on when writing checks (either manually or with PHA$AR). You should also use whatever lines are left over to enter descriptions and account numbers of other payments you must make (newspaper subscription, insurance payment, utilities payments, refundable deposits, etc.). Leave the dollar amount field empty except for deposits. You may enter the asset account name, or if you didn't set up the deposits as assets, enter the actual dollar amounts.

Entering an amount for 'All Months' will set each and every month to the same value; or you can use the up/down cursor keys to position on a specific month and change or enter an amount there. Strike Esc when finished.
To the right of the budget amounts is a list of amounts actually spent and an overall summary of your full budget (for all categories for each month).

Income category: Eloise Pay

| All Months: | 0.00 | Actual | Overall Budget Summary Income - Expense = | Net Income |
|---|---|---|---|---|
| Jan: | 3000.00 | 0. | 3000. 3143. | -143. |
| Feb: | 3000.00 | 0. | 3000. 3143. | -143. |
| Mar: | 3000.00 | 2000. | 3000. 3123. | -123. |
| Apr: | 3000.00 | 2000. | 3000. 3123. | -123. |
| May: | 3000.00 | 2000. | 3000. 3103. | -103. |
| Jun: | 3000.00 | 0. | 3000. 3093. | -93. |
| Jul: | 3000.00 | 0. | 3000. 3083. | -83. |
| Aug: | 3000.00 | 0. | 3000. 3083. | -83. |
| Sep: | 3000.00 | 0. | 3000. 3083. | -83. |
| Oct: | 3000.00 | 0. | 3000. 3093. | -93. |
| Nov: | 3000.00 | 0. | 3000. 3113. | -113. |
| Dec: | 3000.00 | 0. | 3000. 3133. | -133. |
| Totals: | 36000.00 | 6000. | 36000. 37320. | -1320. |

**PHA$AR includes many of the basic functions found in standard databases. For instance, in the View/Edit Budget option, if you change one number you change them all.**

When entering your cars, use the license plate number or the ID number from the title. When entering life insurance policies, use the policy number in the description, and enter the current cash value or the asset account name in the amount column. You could even enter a line that contains your family's Social Security numbers; this might be useful later on for reference.

Anyway, you get the idea: document the blazes out of every item. Now do the same thing for all of your liability accounts. This can also include other things you consider a debt but did not set up an account for. For instance, you owe your aunt money but you didn't set it up as an account; enter it here with the balance you owe (not negative).

Now review everything on the Net


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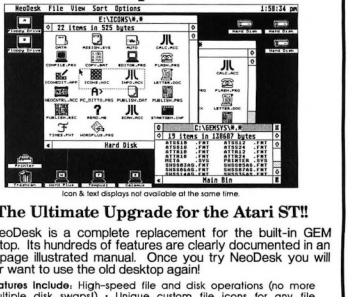


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Worth Statement to make sure you've got it all right. View the Net Worth to see if you like what you see and change anything that doesn't suit you. When you're satisfied return to the main screen and save the register file again.

Now go to Enter Transactions. Select the Adjustment account mentioned earlier. Enter a payment for one dollar to Misc.Expense; use 12/31/89 for the date. Now enter the same transaction, same date, for a negative one dollar. Return to the main screen and select Reconcile Account. Clear both transactions in the Adjustment Account; use Ending Balance of zero and 12/31/89 as the date. Now press [Esc] to return to the main screen, following the prompts. Save the Register File one more time.

### Standard Transactions

That was a lot of work, but I think you'll find it was worth it. Just remember, you only have to do it once!

There are a couple of more things to do, however, before you can become a true "power PHA$AR user." First, you must set up Standard Transactions for all your regular payments and deposits; and you must set up Budgets for all of your expense categories and those income categories that are regular in nature (e.g., paychecks).

The PHA$AR manual describes well the process of setting up Standard Transactions. Just a few hints, though: set up a separate page for each paycheck deposit and for different types of payments. For instance, set up a page for insurance, a page for utilities, a page for rent or mortgage and so on. This makes entering transactions more manageable. When entering the paycheck deposit(s), use "Deductions" as the account; show the gross amount of the check as the deposit amount, to the appropriate income category; enter payments to the appropriate expense categories for your tax deductions, medical and life premiums withheld, etc. Any cash amount you normally withhold when you deposit the check should be entered as a transfer to the cash account (PHA$AR-supplied). The remaining amount is the actual deposit amount to your checking (or savings) account; enter this as a transfer to that account. The remainder should now be zero. The reason for doing things this way is that you now track gross income and will have the right figures for tax time.

Now set up Budget amounts for all Expense categories and the regular Income categories. Some expense categories won't need a budget, like Misc. Expense; but enter as many as you can reasonably estimate. When you're finished,

*continued on page 70*


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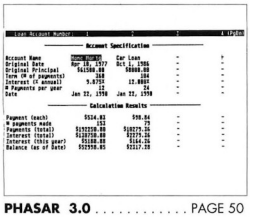
# Disk Contents

*Programs on Side 1 of Your START Disk*

## BUDGETING BONANZA



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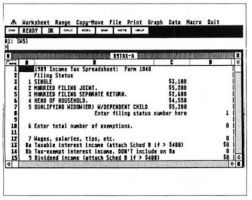


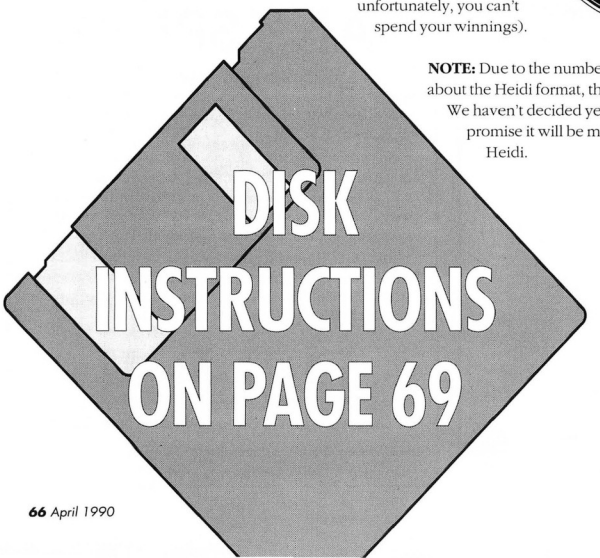
**TAX TEMPLATES** . . . . . PAGE 72

Tired of shuffling through a shoe box crammed with receipts, squinting at the marks left by faded ribbons, trying to remember the amount of the check you forgot to record? Organize your finances with this month's feature program, **PHA$AR**, the Professional Home Accounting System and Register, written by Tom Marks of Marksman Technology. The program has been split into two arcfiles, titled **PHA$AR version 3.0** and **PHA$AR Datafiles**.

And speaking of money, Uncle Sam wants his share. Yes, it's tax time again, and we're presenting Tom Chandler's **1989 Tax Templates** to use with LDW Power. In addition to the 1040 long form and its accompanying schedules, we've included spreadsheets for calculating income from selling your home and moving expenses.

With the spare change left over after your annual IRS payment, you can have some fun, Las Vegas style, playing Mark Siegel's **Super Jackpot Slots**. You have nothing left over, you say? Don't worry. You don't have to risk a cent (and, unfortunately, you can't spend your winnings).

**NOTE:** Due to the number of complaints we've received about the Heidi format, this is the last month we're using it. We haven't decided yet what will replace it, although we promise it will be more stable and straightforward than Heidi.



## PROGRAM REQUIREMENTS

■ compatible
□ not applicable

| Arcfile | Side | Memory: 512K | Memory: 1M | Resolution: HIGH | Resolution: MED | Resolution: LOW | Notes |
|---|---|---|---|---|---|---|---|
| PHASAR.ARC | 1 | ■ | ■ | ■ | □ | | |
| PH_DATA.ARC | 1 | □ | □ | □ | □ | | needed by PHASAR v. 3.0 |
| JACKPOT.ARC | 1 | ■ | □ | □ | ■ | | |
| 89TAX.ARC | 1 | □ | □ | □ | □ | | runs under LDW Power |
| PHTAX.ARC | 2 | ■ | ■ | ■ | □ | | companion to PHASAR v. 3.0 |
| STW.ARC | 2 | ■ | ■ | ■ | ■ | | |
| STW_GERM.ARC | 2 | ■ | ■ | ■ | ■ | | |
| STW_SPAN.ARC | 2 | ■ | ■ | ■ | ■ | | |
| STW_MAN.ARC | 2 | ■ | ■ | ■ | ■ | | |

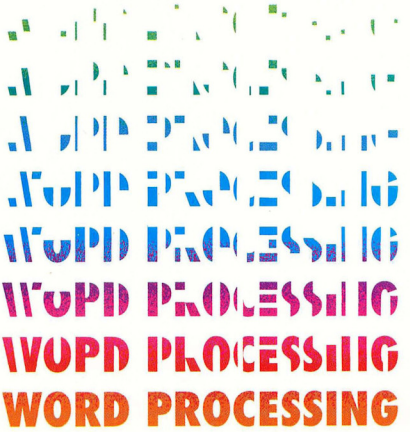
**JACKPOT SLOT** . . . . . PAGE 82

*Programs on Side 2 of Your START Disk*

## ST WRITER UPDATE

Dr. Bruce Noonan does it again! This month's bonus is an update to the popular word processor, **ST Writer**. For **ST Writer Elite version 3.6** Noonan embedded the resource file in the program and sped up the search-and-replace routines. He made the same improvements for **ST Writer Elite: German** and **ST Writer Elite: Spanish**. We've included the **ST Writer Elite Manual** for those who want to brush up on all the features of this perennial favorite.

As another tax-time bonus, we're presenting Tom Marks' **PHA$AR Tax Calculator**, which works with PHA$AR version 3.0 on Side 1 of your START Disk. This program uses the data in your PHA$AR files to provide painless tax statements. File now and get your refund early!

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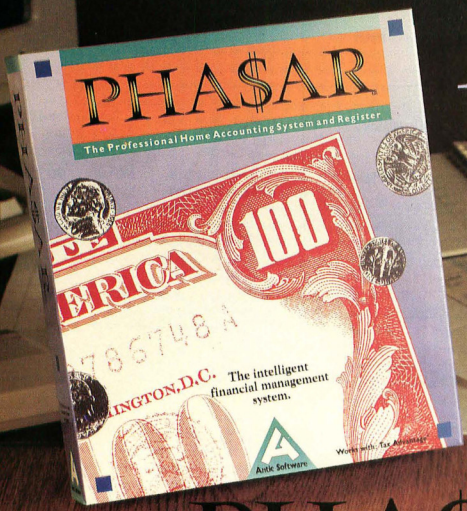
# Your Financial Partner

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- ***1989 Tax Templates***

**PHA$AR 4.0** gives you the tools you need to plan and track your finances to ensure that you get the most benefit from your hard-earned income.

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# Disk Instructions

*Now Using Your START Disk is as easy as 1, 2, 3!*

### Running the START Menu Program

**From a Floppy Disk:** Put your START disk in drive A and turn on your computer. The START menu program will come up automatically.

**From a Hard Disk:** Boot your computer as you normally would. If you're using a color system, set the computer to medium resolution. Put your START disk into either drive A or B, and double-click on the drive's icon. After the disk's directory appears, double-click on START.PRG. Note: *Do not run the menu program from your hard drive!* Each issue's disk has its own START.INF file which must be in the same directory as START.PRG.

When the menu program first runs, it will ask you to describe your floppy disk drive configuration. It is very important that you enter this information correctly, as the program will use the information later to correctly back up and prepare your program disk. Click on Single or Double sided for both drives A and B; if you only have one drive, the Drive B buttons will be greyed out. If you are unsure whether your drives are single- or double-sided, click on Help.

### What Then?

This is where accessing your START programs gets easy. Just follow these three steps:

#### Format Disk

**1.** Here, you can format a single- or a double-sided disk in either drive A or B. Click on the drive containing the disk to format, select Single or Double sided and then click on Format. Formatting a disk will delete that disk's contents. Do *not* format your START disk.

#### Backup START Disk

**2.** We recommend that you make an archive copy of your START disk, which is in the special Heidi format. If you have a single-sided drive you can back up Side 1 of your disk onto one single-sided disk. We also recommend that you borrow a friend's drive to back up Side 2 of the disk onto another single-sided disk. If you have a double-sided drive, you can back up the disk onto one double-sided, Heidi-format disk. The computer will rely on the system configuration information you entered earlier to tell you which disk needs to go in which drive.

#### Prepare Disk

**3.** This is the heart of the START menu program. The Prepare a Disk option brings up a window that lists the names of the programs, source files and demos on this issue's disk. The names of the programs will be given in full; you don't have to worry about the specific names of the archive files. If a program has accompanying source code on the back side of the disk, the entry will be listed separately. For example, one entry may be "Avecta I: Ebora" and an entry futher down would be "Source Code for Avecta I: Ebora."

Next, a dialog box will ask for the destination directory, and whether you wish to send the program files to a folder. The destination directory may be a floppy, hard drive or RAM disk. If you wish to put the files in a folder, the program will offer you a default folder name. Press (Return) to use this name or edit the path directly. If the folder does not already exist, the program will create it. If you select drive A or B as your destination drive, the program will ask you if you want to format the destination disk. The menu program will then un-ARC the files directly to the destination drive, and will minimize disk swapping by analyzing the drive configuration you specified earlier.

### Bonus Options

Each month, your START disk menu program will include special bonus information ranging from the issue's disk contents and coming attractions to special subscription offers and the latest-breaking Atari news. Click on the various menu buttons and scroll through the main menu window to read this information.

### And There You Have It

For more detailed instructions, click on the Help button. Click on Exit to return to the Desktop. And that's all there is to it — un-ARCing START programs was never easier!

### Credits

Your START disk format and interface were developed by some of the most talented programmers in the ST world. Contributing Editor **David Ramsden** wrote the interface for the menu program and the custom unARCing routines that are as much as 40 percent faster than ARCX.TTP. Contributing Editor **Dave Small** and **Dan Moore** wrote the Heidi formatter that made the back side of the START disk accessible for the first time. **Charles Johnson** of Codehead software wrote a custom version of the STARTGEM program that lets the menu program run at boot time even though it's GEM-based

*continued from page 65*

you'll be set up to graph your Actual vs. Budget expenditures to see how you're doing and to make any necessary adjustments.

If you plan to write checks with PHA$AR, you also need to enter all the appropriate information in the PHA$AR Names file. The manual will guide you here. If you're using version 3.01 and you use or plan on using The Tax Advantage tax program by Double Eagle Software, you also need to go to Set Up Tax Advantage Codes in the Setup Menu. The Tax Advantage Manual will supply the appropriate codes you'll need and the PHA$AR manual tells you how to enter the codes.

Now, exit the program after saving the Register File one last time. Copy the register file to a backup disk and guard it with your life! I say this because I once spent over a week rebuilding my file after I somehow trashed it. But I know the fault was all mine — PHA$AR has not caused one error in over two years of daily use.

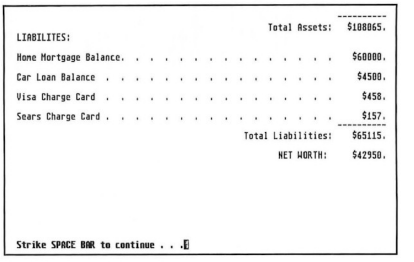
**I don't even use a spreadsheet for budgets anymore.**

### What's the Point?

You may be wondering why all this work is necessary. I'll try to make all of this clear.

First, we've already discussed the necessity for an accurate Cash Flow Report and Net Worth Statement. The Net Worth Statement can also aid you when you apply for a loan, so if you keep all of the relevant data there, it will save time when you go to the bank or finance company.

Second, most people only show their loans and credit card payments as expenses, so they don't have the capability of tracking these balances and checking their credit card transactions. By keeping these as liabilities, and posting payments to the liability accounts, you can monitor the actual remaining balances, and show them on the Net Worth Statement. Remember, all assets and liability accounts must be reconciled periodically (not just the bank accounts), or at year's end you'll fill up next year's file with stuff you don't need. You need to do this anyway to track credit card transactions and the like; I've caught more than one error on my credit card statements this way.




**PHA$AR's Net Worth Statement lets you calculate your total net worth based on your assets and liabilities.**

Some people show these assets and liabilities as described above, but do not have an expense category for them so they can track the actual payments. This gives them an accurate Net Worth Statement, but the Cash Flow Report doesn't reflect their actual "expenses vs. income." That's why you also have an expense category for each liability payment.

### Every Problem Contains Its Own Solution

Now that you have all this set up, there are two ways to enter your transactions to support this activity. But first, a little background. PHA$AR, as good as it is, has one flaw: when entering split transactions, you can only split between different expense (or income) categories; you cannot split between an expense and a liability, nor between an asset and an income category. It also forces you to treat payments to asset or liability accounts as transfers.

Because of this limitation, use the "adjustment" account. When you set up the Standard Transaction Page for Liabilities, you should have entered the payment as a transfer from the paying account to the Liability account. This will accurately reflect the balances in both accounts. You also should have set up a payment from the Adjustment account to the corresponding expense category for that liability. By the way, this theory also holds true when you have a normal payment from checking to savings. You should have an expense category for savings.

A side effect of these limitations is that if you do things as I just described, normally your paying account will show a double payment which you would have to play around with to get your paying account to show the correct balance. If you remember, I told you to enter those two offsetting payments in adjustment for 12/31/89 and reconcile them as of 12/31/89. We're now using PHA$AR to overcome its own limitation!

Any time you enter a transaction in the adjustment account, you'll specify the real date, which of course will be earlier than the last-reconciled date. PHA$AR will then ask you if this is already accounted for. You will enthusiastically answer yes. This causes the amount of the transaction to be

correctly posted to the expense (or income) category, but not affect any other balances, including the zero balance of adjustment! Your normal paying account is not affected, of course, because the payment was not issued from there. If you enter a date of 12/31/89, you're still OK.

You should handle all payments to expense categories for liabilities (and assets, for savings and the like) this way. Your normal paying account will always be accurate and your Cash Flow Report will be too!

Remember to post transactions from cash against your Expense categories as accurately as you can. The ideal is to wind up at the end of each pay period with a zero balance in cash. This means that you have accurately (we hope) accounted for every penny spent. Now, of course this isn't going to happen in the real world, but give it your best shot. Any leftover in cash should be posted to Misc. Expense, since one way or another, the cash went *somewhere.*

### Come Tax Time

A comment or two on handling tax time: PHA$AR has a nice program for doing your taxes, but I never used it because I've used The Tax Advantage (Simon & Schuster) ever since it was released. I highly recommend you use this product. PHA$AR v. 3.01 lets you set Tax Advantage Codes in your Register File for use by The Tax Advantage. At tax time, you just copy PHASAR.REG to your Tax Advantage data disk and the program loads all your tax data for you. Bear in mind that it will only load those categories that have Tax Advantage Codes entered in the Register File, so do the best job you can in setting up your expense and income categories and applying the correct codes. It takes me less than one hour to completely do my Federal taxes this way, including the Long Form, Schedule A and detailing of miscellaneous deductions.

### No Cash Flow

Sometimes you have a deposit and/or a payment that just doesn't fit into your regular category and account structure. If you handle it in the normal way, it will skew the results of your Cash Flow Report so that it doesn't reflect reality. In this case you post the transaction to "No Cash Flow" and the amount will not be shown in your Cash Flow Report, but your overall financial position will still be accurate. When you print or view your Category Summary, these are treated like net cash: they are shown, but not totaled.

An example would be when your company gives you a check for $2,000 to pay the movers when you're transferred to a new state. If you handle it this way, the deposit will not affect you at tax time, nor will it inaccurately inflate your overall income total. When it comes time to pay the movers, you post the actual amount, if equal or less than $2,000, to "No Cash Flow" expense and the remainder to "Moving Expense." This amount also needs to be taken out of "No Cash Flow" income and shown as miscellaneous (taxable) income, unless you have to give it back to the company. Usually, it can be applied against your other moving expenses. If the payment to the movers is greater, then the $2,000 is entered to "No Cash Flow" expense and the rest is posted to moving expenses.

### Conclusion

I hope this has been helpful to you. I have found the combination of PHA$AR and The Tax Advantage to be more than capable of handling all of my needs financially. I don't even use my spreadsheet for my budget anymore. ■

***Steve Roquemore is a freelance writer who lives in Scottsdale, Arizona. His past work includes a review of PHA$AR 3.0 in the June 1989 issue of START.***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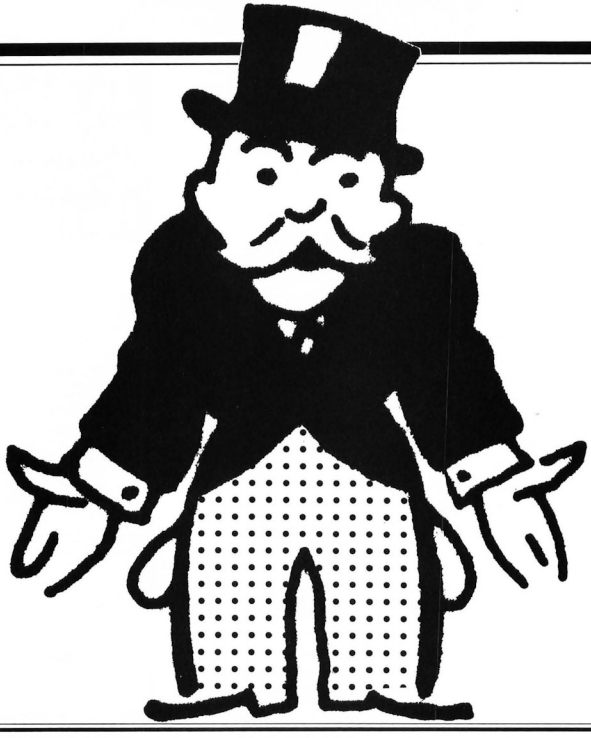

# IT'S TAX TIME AGAIN

ON DISK

# START's 1989 Federal Tax Templates

TEMPLATES BY TOM CHANDLER
ARTICLE BY ANDREW REESE, START GRAPHICS EDITOR

***It's time once again to file those tax returns with the Internal Revenue Service. On your START disk is a template for use with LDW Power. If you have the program and 1MB of memory or more, you're all set to get your return filed accurately and on time.***

*April 15 isn't far off, but help is on the way in the file TAX89.ARC on Side 1 of your START disk.*

Tearing your hair out doing your taxes? Almost ready to hire a CPA? Before you go bald or broke, try loading our 1989 Tax Templates into the LDW Power spreadsheet program. These templates will help you prepare the following forms for 1989:

- Form 1040 (Long Form)
- Schedule A (Itemized Deductions)
- Schedule B (Interest and Dividend Income)
- Schedule C (Self Employment Income)
- Schedule D (Capital Gains)
- Schedule E (Supplemental Income Schedule)
- Schedule SE (Social Security Tax)
- Form 2106 (Employee Business Expenses)
- Form 2119 (Sale of Home)
- Form 3903 (Moving Expenses)

## Getting Started

START's 1989 Tax Templates require an ST or Mega with at least 1MB of memory; LDW Power from Logical Design Works; your 1989 Form 1040 and Instructions; and your START disk.

For further tax assistance there are a number of books available at bookstores and newsstands or you can pick up a free copy of Publication 17, Your Federal Income Tax, from the IRS. You may also want to have a printer connected to your ST, so that you can print out your completed templates.

To get started, boot this month's START disk; the START menu program runs automatically. At the main screen, click on Prepare, then select "1989 Tax Templates." The spreadsheet will un-ARC directly onto the destination disk you specify. Included within the same directory is an ASCII-text READ_ME file that lists all the forms used and where they're located within the template.

Now, start up LDW Power . Load in 89TAX.LDW and you're ready to begin.

## Spreadsheets and Taxes

Each piece of information is entered in a spreadsheet cell — similar to the lines and columns on your tax forms. We've already derived and included the formulas you'll need. If your data changes (you find another stack of receipts, for instance) go to the appropriate location, change the number there to the correct figure and the relevant portions of your tax return will be recalculated.

Many different taxpayers can use the same tax template. For example, you can save your own template out to disk under the name MYOWN.LDW and then reload the blank template for your brother to use. He can then save his to disk under the name BROTHER.LDW, and your aunt can then use the blank template.

Keep your IRS Forms and Instruc- ▶

tions booklet nearby while you're preparing your taxes. While we have identified every line on the template with the line number from the forms, we couldn't include all of the notes, references and cautions on the original forms. You'll need the instructions to decide how to treat some of your income and expenses.

If you need to complete forms that are not a part of this template, you'll have to complete them manually and then transfer your figures from them into the spreadsheet. The program and template can take over from there.

You'll have to compute your own tax; we just couldn't include all of the Tax Tables and Tax Rates without ballooning the size of the template. Once you complete Form 1040 down to Line 37, Taxable Income, follow the instructions from the IRS to calculate your tax and enter it on Line 38.

When you complete your template and arrive at a correct figure for Line 63 or Line 65, save your template to disk! Then, follow the instructions that came with your spreadsheet program to print out a copy. LDW Power comes with a utility that lets you print spreadsheets sideways, enabling you to fit wider printouts on a page. See the appendices to the LDW Power manual for directions. Remember that the IRS will not accept your printed spreadsheet in lieu of completed forms; you'll have to manually copy the figures onto your official return.

As with any complex and important project, be sure to save your work often and examine your results with great care. If something doesn't look right, check your figures carefully and if you can't find any errors, seek the advice of a professional tax preparer. The most common errors reported by the IRS are incorrect data entry and arithmetic errors. To the extent possible, we've included formulas that will make correct calculations, but you're responsible for entering your information correctly. (Editor's Note: *START cannot be held responsible for any mistakes that might be made in your tax calculations as a result of using this template.*)

Good luck! And remember: tax avoidance is not a crime, but tax evasion is! ■

***Andrew Reese is special Graphics Editor for START and a former attorney and tax preparer. Tom Chandler is a Certified Public Accountant in the San Francisco Bay Area.***

**PRODUCTS MENTIONED**

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## NEW! BACK TRAK UNLEASHES DOUBLE-SIDED DISK DRIVES

New *Back Trak* software gives ST users more — for less.

Double-sided drives are now standard equipment on all ST computers, but software companies continue to churn out programs on single-sided disks. For those of you with double-sided disk drives, it means wasting 50% of your disk's capacity! With blank disks costing up to $5 each, you waste dollars every time you buy a program or make a back-up!

*Back Trak* allows access to backside of single-sided disks, **doubling your storage capacity.** Use newfound space for files, saved games, even boot (self-loading) programs. *Back Trak* lets you boot off front or backside of disk. And, allows booting from drive A or B. (Booting from drive B proves invaluable if your internal drive ever breaks down.)

Fully compatible with copy protection programs like *ST Copy, Copy II ST* and *ProCopy. Back Trak* even lets you put protected programs on the backside of your disk. For example, save games on backside of *Dungeon Master* — then switch back and forth instantly without swapping disks. Or, save a two-disk set on a single disk.

Every time you use *Back Trak*, you save time and money. And, you'll see less wear and tear on drive heads as you utilize your double-sided drive's full potential.

With this pure software program, there are no special connectors to fool with. No cables to cut.

**Only $29.95**

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You'll wonder how you ever got along without it!

*Switch/Back* lets you load two or more programs into your ST and switch between them with lightning speed. Works with games, business programs, utilities, compilers, you name it. Although only one program is running at a time, the other is available instantly. A press of the button returns you right where you left off! Ideal for word processing and customer service applications.

Gaming feature lets you save almost any game, then continue playing. If you get into trouble, just switch back to where you were, as many times as you like! Instant replay!

What's more, *Switch/Back* lets you save many **protected** programs as standard TOS files — to be stored together on disks, compressed, or even run off a hard disk.

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*ST World,* August 1988

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*ST Informer,* August 1988

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*Jam Master* requires a cartridge-based sound digitizer for output such as *Digisound Professional,* and any MIDI compatible keyboard. Create your own sounds with any ST digitizer. Or, experiment with 50 prerecorded sounds, from drums to violins.

*Jam Master* is packed with powerful features like full keyboard mapping. Assign your keyboard to as many as **32 different sounds,** any number of octaves. Play chords up to four keys at a time. Even blend four completely different sounds.

Advanced recording studio feature records music as you play. Record two, three, up to four tracks, and play back together. You'll be a one-man band! Complete *Beat Box* drum patterns (playout of up to four digitized sounds at once) can be added as a single voice, and played along with three more sound tracks! Adds a full drum accompaniment to your recordings.

This first-of-its-kind program actually lets your ST play back in real time. Record an expert pianist, play back and watch your keys go to work as your ST transforms into a player piano. It's fun and fascinating!

A real-time, fine-tune feature allows total pitch control. Lets you tune-up with the band. 40K sampling rate capability offers superior quality. (The faster the sampling speed, the higher the sound quality.)

### TECHNICAL SPECIFICATIONS

- Plays four-voice polyphonic digital sound
- Incorporates *Beat Box* drum tracks as one sound
- Supports sampling rates up to 40K
- Supports looping and decay
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Compatible with any MIDI keyboard. Even turns your Atari ST keyboard into a musical synthesizer. Each key plays a different pitch. Just press keys to make a sound. It's that easy.

*"The Cadillac of ST sound digitizers. If you plan any serious sampling and sampling editing, go with Digisound."*
Jim Pierson-Perry
*START,* July 1989

*"All the nice little touches are there to make it a joy to use for years to come. I'm in love with the product."*
LeRoy Valley
*ST Informer,* June 1988

## DIGISOUND PROFESSIONAL —

The high-fidelity sound system used by professionals.

Provides two input jacks (one for unpowered source, i.e., microphone or turntable, and one for powered source, i.e., tape player or TV). Allows playback through monitor, stereo, external amplifier or headphones. Input and output gain controls accommodate any kind of equipment. Special logarithmic sampling gives wider dynamic range with less distortion.

**Only $149.95**

## DIGISOUND ST —

Offers one input jack. Accepts input from cassette player, TV, stereo, VCR, amplifier or powered microphone. Sound can be played back through monitor speaker (color or monochrome). Digisound was used to create the voice commands in *Chessmaster 2000.*

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## COLOR COMPUTEREYES™

Capture your picture, or your favorite star's, with the first and only full-color video digitizer for the ST!

*Color ComputerEyes* uses any standard video input — video camera, VCR or video disk. Works in all ST resolutions. Low resolution provides 16-shade black & white or full-color pictures. Features automatic calibration of contrast, brightness and white balance.

*"A major breakthrough in video digitizers for the ST."*
LeRoy Valley
*ST Informer,* August 1988

Pictures can be used with *PowerPrint II, Degas, Neochrome* and others. Plugs into cartridge port for easy setup.

**Only $199.95**

## NOW AVAILABLE!

You and *Beat Box* will make awesome rhythms together from waltz to rock, rap to jazz, whatever your preference. **No musical knowledge required!**

Polyphonic drum machine software comes with over 35 prerecorded digitized sounds including drumbeat, cymbals, human voices, computer voices, synthesizers, bass guitar and more.

Create your own drum and musical patterns in **four** voices. (They said it couldn't be done!) Combine and arrange up to 30 different patterns to create an entire rhythmic composition! An ideal accompaniment for musicians. *Beat Box* provides you with your own custom drummer for the price of a metronome!

*Beat Box* contains a public domain player program so you can share your musical masterpieces with friends.

No need for special equipment. Sound is played through monitor, amplifier or stereo. Also compatible with all ST sound digitizer cartridges, including *Digisound Professional.*

*"Very impressive. Even with all four sounds at once, playback sound quality is superb."*
Dave Edwards
*START,* December 1989

*"I recommend Beat Box to anyone interested in exploring the area of drum or pattern sequencing of sample sounds or anyone interested in exploring their musical talents."*
Tom Tjarnberg
*ST World,* June 1989

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Zoom option lets you blow up small portion of image. Mirroring is great for T-shirt iron-ons. You can also reverse shades in printed image so blacks become whites and vice-versa — just like a photo negative. Image can be rotated 90° to print up and down or across the page.

Print 16 shades for incredible detail. Selective shading allows you to print multi-color pictures by printing one color at a time with color ribbons.

*"PowerPrint works perfectly. A must for your program library."*
Donna Wesolowski
*ST Informer,* May 1988

*PowerPrint II* lets you capture and print almost any ST screen. Works with *Star, NEC, Citoh, Gemini, EPSON, XM8048* and compatible printers.

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# MANIACS, MISSIONS AND REMARKABLE MACHINES

In which Andrew Reese joins a cult, David Plotkin joins the military and Stephen Mortimer takes Atari by the hand.

**Oh no! Sexy Sandy has been abducted by psychopaths and is being held in the sinister Maniac Mansion. Do you have the stomach to save her in the latest RPG from Lucasfilm?**

**Interstellar warriors, arise in SSI's Star Command! Take the captain's wheel and lead your crew of eight, recruited and trained by yourself, on critical missions through space.**

## MANIAC MANSION

REVIEWED BY ANDREW REESE
START GRAPHICS EDITOR

Just as there are cult movies, so too are there cult games. One of those is Lucasfilm Games' Maniac Mansion, a crazy and *funny* adventure game filled with monsters and madness.

Maniac Mansion was the first graphics adventure game from Lucasfilm Games, released in several formats in 1977, and quickly became a hit. The game creation system used on Zak McKracken and the Indy Adventure Game is called SCUMM, the Script Creation Utility for Maniac Mansion. It was in Maniac Mansion that Lucasfilm's unique point-and-click sentence builder for character control first appeared.

But it was not until late last year that Lucasfilm moved Maniac Mansion to the ST. Thankfully, they waited until they could use a later generation of SCUMM to produce higher resolution characters and screens. The wait was worth it; if you've seen Maniac Mansion on an Apple or Commodore 64, you know what I mean. It's also nice that you

can install Maniac Mansion on a hard disk to speed up game play.

### Uniquely Lucasfilm

Like other Lucasfilm graphics adventures, the Maniac Mansion screen is divided into five areas. At the top is a message line and immediately below it is the Animation Window, where all the action takes place. Next down is the Sentence Line, followed by Verbs and your Inventory. To make your character(s) do anything, you form a command sentence by clicking on a combination of verbs, items in your inventory and objects and creatures in the Animation Window. Since the parser that interprets your sentences needn't search through every possible word *you* can think of, it can handle its limited vocabulary much more intelligently. For example, if you want to change a noun in your sentence, you just have to click on the new item and it will replace the appropriate noun.

### Maniacal Plot

It seems that Sandy, a sweet, young cheerleader, is being held in the basement of the strange mansion owned by mad scientist Dr. Fred. Also in the mansion are Nurse Edna, Wierd Ed, Dead Cousin Ted, the Tentacle and another critter I won't reveal. Your task is to rescue Sandy from this collection of wierdos by directing a team of four teenagers, including Dave, Sandy's boyfriend, and two others you can choose. Each of the teenagers has a "talent" from playing heavy metal to typing.

The amazing and delightful thing about Maniac Mansion is that you can solve the game with *any* team of three, but the gameplay and puzzles will be different, depending on the make-up of the team. Win the game one way and you won't put it away — you'll want to try a different team ... and then another. The graphics are quite good and the "cut-scenes" (inserted animation scenes that show you what's going on elsewhere) are very well done. This is a game that's fun to play with three of your friends (or kids) hanging over your shoulder, telling you what to try next. Just be sure that you save the game often, as there's no telling when one of your team will meet an untimely demise — like just going to the kitchen for a snack!

### Liked the Game, But...

I like this kind of game, although for all the convenience of the command structure, I'd like to have the alternative of typing in the same words. It would be quite a bit faster, provided you can type reasonably well. The best of all possible worlds would be for Lucasfilm and Sierra On-Line to combine their interfaces.

**Maniac Mansion was the first graphics adventure game from Lucasfilm.**

Lucasfilm puts out the absolute best hint books I've ever seen and the one for Maniac Mansion is superb. It gives you four ways to cheat: color-encoded questions and answers, a list of objects and their uses, a map of the six floors of the mansion and finally a scene-by-scene explanation of one solution. You can get as much help as you want. I have mixed feelings about whether to recommend that you buy the hint book. The game is so much fun without it, that it's a shame to take short cuts and miss out on some of the designers' humor.

If you like graphics adventure games, you'll want Maniac Mansion. Absolutely. It's not only a cult classic, but a fun way to spend (quite) a few hours.

## STAR COMMAND

REVIEWED BY DAVID PLOTKIN
START CONTRIBUTING AUTHOR

Star Command is a role-playing game where you guide a eight adventurers around the galaxy on their missions and battles in the far future. Game play is fun, but hampered a bit by cumbersome controls.

(Editor's Note: *According to SSI, some copies of Star Command were released with a key-type virus. Any virus killer, such as George Woodside's V-Killer, will remove the virus. You can also return your disk to SSI and they will gladly replace it free of charge.*)

### Starting Out

Start out by picking your party of eight Pilots, Marines and Soldiers. You need at least two pilots (one to fly your ship and one to fly the dropboat down to planets). The other six members should be Marines or Soldiers. After selecting your recruits, you must train them. As each member completes a session, they either pass and achieve a higher skill rating or end up failing and doing "desk duty." At the end, you have the option to get rid of a poorly performing recruit and replace him with a fresh one.

The first thing you must understand is that you're poor. It quickly becomes apparent that you can't amass enough funds to get the equipment you need by honest means, so you must resort to raiding high-tech worlds and stealing items to sell at the space station. There's simply no choice.

### Spatial Relations

The playing area consists of the entire galaxy. There is one triangular section which is considered relatively safe. It's bound by three space stations, which are used for fueling and supplies. To one side of this triangle is a zone almost completely overrun by pirates of human descent, and on the other side, an alien insectoid race holds sway. Needless

*continued on page 80*

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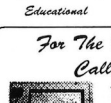

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*continued from page 77*

to say, they are hostile.

The main playing screen consists of three sections. The first is an area across the bottom that lists commands. The second shows the status of each person in your party, and the last maps your environment.

The galaxy is divided into a grid 32 sectors high by 32 sectors wide. A small white cursor represents your ship; move it around the galaxy with the arrow keys. You must be careful, though, because traveling from sector to sector uses fuel. If you run out, you will eventually be rescued, but some of your men may starve to death waiting.

### Two Things Can Happen

Basically only two things can happen in Star Command: communicating and fighting. Your encounters with other ships and beings are either friendly or hostile.

Space battles are broken into movement and firing phases. During the movement phase, you can rotate the ship into any direction and position your squad around, or jump into hyperspace if you think you're overmatched. In the firing phase, you can shoot ships in range and see results. Each turn fires off multiple shots, the exact number depending on the weapon. One annoying thing about combat is that all the guns that are targetted continue to fire even after the target is destroyed, wasting ammunition. After awhile, however, I was able to anticipate when a target was nearly destroyed and save my bullets.

You can try to board the enemy vessel, in which case the action becomes a personal confrontation between your six men (excluding the pilots) and the enemy crew. Such a confrontation can also occur if you send your party down to a planet surface. On a planet, you can retreat from the enemy; however, on a spaceship the combat must be resolved. Personal combat is much like ship combat. If talking fails, fight. One thing the manual never mentioned is that pirates can surrender, and you won't be allowed to shoot at them if they do, even though their surrender is not reported until the combat is over.

### Questionable Commands

The controls for Star Command are somewhat cumbersome. They consist of single-key commands, and question/answer interaction. Sometimes the mouse pointer will work to make the selections. The graphics are also relatively simple, if not crude, but they do show you what you need to know. The game does not work under TOS 1.4, and pressing [Control]-[C] breaks into it. A number of bugs also showed up, including the fact that the upgraded weapons rating doesn't show up properly when you inspect your squad. There are also some things I never did figure out, such as why a weapon sometimes showed up with an asterisk next to it.

Despite these small annoyances, Star Command is quite playable. Since different missions show up each time you start a new game, it remains a challenge, and with all the complexities involved can absorb you for a long time.

## THE LYNX HAND-HELD GAME SYSTEM

REVIEWED BY STEPHEN MORTIMER
START CONTRIBUTING EDITOR

**All the hype is justified: games available for Lynx are some of the most addicting in years.**

The Lynx — is it a car, an animal? No, it's Atari's revolutionary color portable entertainment system! I was lucky enough to purchase one of the 70,000 units shipped to stores. Combined with local TV ads and features in magazines, most of these units were sold out in a few short weeks after their introduction in late November. Of course, all of the hype is justified: the games available for the Lynx are some of the most addicting in years and overall the system blows Nintendo's GameBoy out of the water.

**Here it is! The Lynx, Atari's new color, portable entertainment system.**

### Impressive Package

The Lynx is made from high-impact plastic and features a color LCD screen with a resolution of 160x102 pixels. Sixteen colors are available from a palette of 4,096. The 4MHz processor keeps the action fast paced and custom chips handle tasks normally done in software.

The hardware allows for an infinite number of sprites, has a built-in scaling system to create realistic scenes as you approach or move away from objects and has collision detection. Internally, the joypad and buttons use switches with conductive rubber contacts that provide high reliability.

Finally, the Lynx is powered by six AA batteries or an AC powerpack. The batteries have a life of approximately four hours of use, and the unit shuts off automatically after a period of inactivity.

Game cards that can hold up to 8MB of information are inserted into a slot that is revealed when a hatch is opened on the side of the Lynx. Volume and screen contrast controls are on opposite sides of the unit that fits comfortably in the hand. Headphones can be connected for privacy and the screen can be flipped for left-handed users.

### Games Included

Included with Lynx is California Games by Epyx. Four events — BMX racing, surfing, halfpipe skateboarding and footbag — provide for a great introduction to the system without the immediate need to purchase additional games.

Other games that exist include a Blue Lightning, Electrocop and The Gates of Zendocon.

### High Quality

Atari's Lynx is a high-quality game system. Game action is very realistic, fast, and smooth. I have gone through three sets of batteries and several hours of AC power in only two weeks of use. Although I haven't found another Lynx to test this, multiple units can be connected by a ComLynx cable to allow multiplayer games with each player having their own perspective on the action. The number that can be connected is controlled by software. Surfing lets two people surf together at the same time, either helping or ramming each other.

Atari has a hit in their hands, literally, in Lynx. ■

### PRODUCTS MENTIONED

**Maniac Mansion**, $49.95, and **Maniac Mansion Hint Book**, $12.95. Lucasfilm Ltd., P.O. Box 2009, San Rafael, CA 94912, (415) 662-1966.

**Star Command**, $49.95 SSI, 675 Almanor, Sunnyvale, CA 94086, (408) 737-6800.

**Lynx Game System**, $150. Atari Corp., 1196 Borregas Ave., Sunnyvale, CA 94086, (408) 745-2000.


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# A One-Armed Bandit on Your ST

BY MARK SIEGEL

# SUPER Jackpot SLOTS

***With flashing lights, buzzers, bells and the chance to win some big money, slot machines can be very tempting. Unfortunately, playing them can be hazardous to your bank account. Now, with Mark Siegel's Super Jackpot Slots, you can get the feel of playing these one-armed bandits on your ST and it won't cost you a dime. The program runs in low resolution only.***

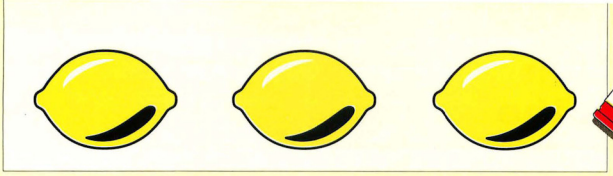
*A winner everytime in the file JACKPOT.ARC on Side 1 of your START disk.*

If you've ever been to Las Vegas, you've seen them: slot machines, rows and rows of slot machines. Clicking, clacking, buzzing and ringing, these machines can lead you to fortune or disaster, depending on how much you're willing to spend and, more importantly, how much you're willing to lose.

With Super Jackpot Slots on this month's START disk, you can play the slots, absolutely free and in the privacy of your own home. You still get the clinging and clanging but at least you won't lose any money (real money, that is).

### Getting Started

To play Super Jackpot Slots, boot this month's START disk; the START menu program runs automatically. At the main screen, click on Prepare, then select "Super Jackpot Slots." The program will un-ARC directly onto the destination disk you specify. Make sure the files SLOT.PRG and SLOT.DAT are in the same directory.




Super Jackpot Slots was written in GFA BASIC 2.0 and runs in low resolution only.

At the Desktop, double-click on SLOT.PRG to run the program. The game will take a few moments to load and then the screen will display six one-armed bandits waiting eagerly for your money. Click on the small dollar bill in the upper left corner, and an alert box will appear, giving you the choice of gambling with $50, $100 or $200 in computer cash. Decide how much you can afford, then click on any of the six slot machines to play. There are two 25-cent machines, two $1 machines, one $5 machine for all you high rollers and a 5-cent machine for the conservative gambler.

### A Typical Super Jackpot Slot Machine

Let's familiarize ourselves with one of these highly sophisticated gambling devices before we take it for a spin. The upper section of the slot machine displays all the possible winning combinations of symbols and the number of coins each pays. As with many of the slot machines in Las Vegas, you win the biggest jackpot if you line up three 7s in a row.

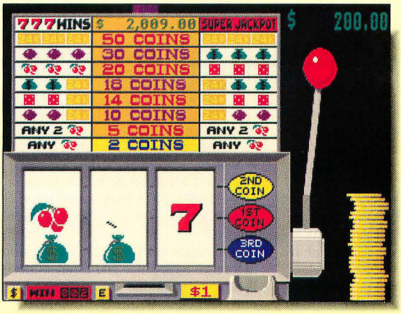
On each of our six machines, the normal payoff for triple 7s is 200 coins. Of course, that's only $10 on the nickel machine. But you're not risking much. It's much more on the $5 machine where those 200 coins add up to $1,000. However, each machine also has it's own progressive "super jackpot," which can get as high as $999,999. This jackpot gets larger as more and more money is put into the machine. The amount continues to grow until some lucky devil wins it, and then the jackpot is reset to a lower amount.

To make things interesting, the jackpot toggles on or off with each coin inserted into the slot machine, so you may not always spin with a chance to win the larger amount. To collect the super jackpot you must hit three 7s while the super jackpot total is displayed at the top of the machine. Otherwise triple 7s pay only the normal jackpot of 200 coins.

The lower half of the slot machine consists mainly of the three reels that spin when the arm is pulled and then randomly come to rest, displaying different combinations of symbols. These symbols vary from machine to machine. Some machines have cherries, others have grapes. Some may have gold bars, or dice, or neither or both. And by the way, if you get three lemons in a row, don't get excited. A lemon on these

*continued on page 85*

**Super Jackpot Slots brings all the excitement of Las Vegas slot machines to your ST. At the opening screen, choose the machine you wish to play. Dollar amounts range from five cents to $5.**




**Amazingly realistic, Super Jackpot Slots' game screen simulates slot-machine action almost perfectly — just put your coins in and pull the slot!**

# Q: Which has the greatest speed, elegance and ease of handling?

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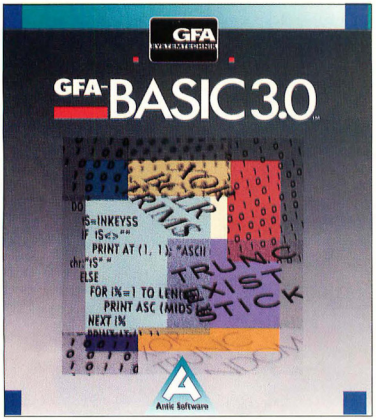


**2.** GFA BASIC 3.0™

# A: GFA BASIC, of course.

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**Your winnings will spit out from the bottom of the machine.**

*continued from page 83*

machines is just as good as a lemon at a used car dealer.

On the lower right of the slot machine is the slot for inserting coins, and on the lower left is the "win meter." This meter counts out how many coins were awarded, if any, on the preceding spin.

You'll also notice a stack of coins to the right of the slot machine. This is your gambling money, thoughtfully provided by your ST. No more then 25 coins are shown on the screen at one time even if you have hundreds of coins. But, as soon as you have less then 25 coins your stack of money will begin to shrink. If there are no coins showing on the screen, you don't have enough money to play that machine, but you may have enough to play another. For instance, with $4 remaining you'd have no coins to play the $5 slot machine, but you'd have 16 coins for either of the 25-cent machines and a huge stack of 80 coins if you played the 5-cent slot machine.

To switch from one slot machine to another, click on the little yellow button marked "E" (for exit), just to the right of the win meter. This will take you back to the opening screen, where you'll notice that the top of the machine you were just playing is flashing. You can go back to that machine or any one of the others just by clicking on it. You cannot leave a machine after you've inserted money into it. (You wouldn't do that at Las Vegas would you?) You'll have to wait until after you spin.

While you're playing a slot machine, your gambling bankroll is displayed in green, in the upper right of the screen. When you have less than 25 coins, this display will turn red to warn you of impending poverty. Of course, if you were actually playing the slots, you probably wouldn't know exactly how much money you had at all times, unless you counted your money after each spin. So for you purists, click on the little yellow button marked "$" to the left of the win-meter. *Presto*, your gambling amount is no longer shown. Click on the button once more to restore the display.

### Playing Super Jackpot Slots

Okay, enough preliminaries, let's play. Move the mouse pointer over to the stack of coins and click. A coin should appear face up, in place of the mouse pointer. Press the left mouse button and drag the coin so it rests just above the coin slot. Now click the mouse again. If you did this correctly the coin will drop into the slot and the appropriate payline marker will light up. If you missed the slot, the coin will fall harmlessly back into the metal tray that catches coins as they come out of the machine. It doesn't show on the screen, but it's there, trust me.

You can bet from one to three coins on each spin. If you play just one coin, the slot machine will pay off on the middle row of symbols only. Insert a second coin, and the top row will also pay off on a winning combination. Wager the maximum of three coins and all three rows of symbols are possible winners. You can't put more than three coins in a machine at one time. After three coins have been inserted, you will not be able to pick up another one from the stack.

If you've finished feeding the slot machine, you're ready to roll. Move the mouse pointer onto the red ball at the top of the arm. Now click the mouse and pull the arm down. The three reels will take a few spins and then stop from left to right. If a winning combination of symbols comes up on a payline which is lit, you've won. The number of coins you've won will be displayed on the win meter, and your winnings will spit out from the bottom of the machine.

If you want to play three coins at a time, there is an alternate way to work the machine. Click on the button just to the left of the coin slot. It's marked with the value of the machine (25 cents, $1, etc). Three coins will automatically be subtracted from your bankroll and the reels will spin immediately with no need to pull down the arm. This method will not work if you don't have enough coins or if you've already inserted a coin into the slot. The button will darken to indicate this.

The game ends when you're out of money. You can go back to the opening screen and get more money to lose, or you can quit the program by clicking on the green exit sign in the upper right of the screen. When you end the program, the file JACKPOT.DAT will be updated and the next time you play Super Jackpot Slots all the slot machines will be just as you left them.

### Program Info and Wrap-Up

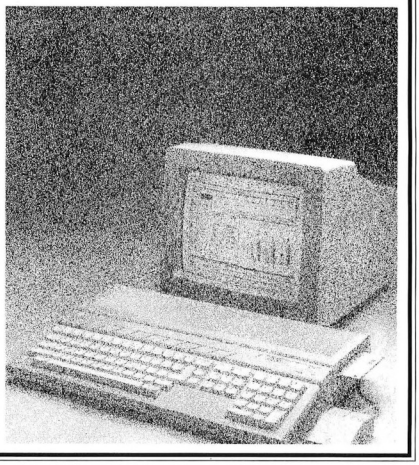
Super Jackpot Slots was written in compiled GFA BASIC 2.0. All of the program's graphics were designed with DEGAS Elite. Some of the sound effects were digitized using REPLAY 4 from Microdeal. Special thanks to 2-Bit Systems Replay for helping get those sounds into the program.

Good luck and may your super jackpots grow forever. ■

***Mark Siegel lives in Van Nuys, California. This is his first program for START.***

# SAVING CAN SAVE YOU FROM AFTERSHOCKS

BY MARK TAYLOR



If you haven't been stranded in Antartica for the last six months, you're probably aware that the San Francisco area experienced a major earthquake last October. I have been employed for several years as a salesman for an ST dealer located about 100 miles north of the epicenter of the quake — we were pretty shaken up but experienced no major damage.

Well, I don't know what seismic radiation drifted up our way after the earthquake but I had five people come into the store the following week with data disks that they could not access and for which they had no backup. In most cases it was while trying (too late) to make a backup that they discovered that the disk or some particular file (always an important one) was no longer readable.

After helping the fifth person to recover lost data, I decided to write this article to prevent others from ever finding themselves in this position. While there are both commercial and public-domain programs that might repair your disk, exercising some basic principles of computing storage is a much better safeguard against that inevitable day when a disk dies.

## 10 Steps to Healthier Data

Disks do die! They die because they are old; they die because they are worn out; they die because they get dirty; they die because of poor media (you bought them at a flea market for 50 cents each); they die because the computer got confused or the disk drive was out of whack and wrote some garbage onto the disk. Least of all, they die because you had a power surge or failure while accessing the disk. Remember, the question is not if, but when.

Following are some basic principles that will prevent the loss of your valuable information:

**1.** *Clean your drive heads regularly.* A speck of dirt can land on an unused track of a disk, go unnoticed, then transfer itself to your drive head and proceed to wipe out a few disks, or redeposit itself on a very important track of some other disk. Head-cleaning kits cost only about $10 and are good for up to 30 cleanings.

Clean your heads every three to six months if you're an average user. Once a month is about right if you're a daily user, if you work in a dusty or smoky environment or if you receive a lot of disks from non-commercial

## Save your work every 20 to 30 minutes.

sources outside your control (e.g. swapping with friends, public domain from clubs, etc.). Anytime you get a read-write error more than once, the first thing to do is clean your drive heads.

**2.** *Save your work every 20 to 30 minutes, especially if it can't be easily re-created.* It never seems to fail that during a period of intense concentration, two hours and three pages later, I forget to save and then it happens: the system crashes! WordPerfect has a unique feature that lets you set a time period for an auto-save. Most people set this for 10-15 minutes.

**3.** *Save your work twice on two separate floppies, or once to your hard disk and once to a floppy without waiting until you quit back to the Desktop.* This cannot be emphasized too much. It guarantees that you'll have an immediate backup to everything you do. If you have only one drive, merely save on your original disk, then take it out of the drive and put in your backup and save your file again, then put the original disk back in.

If you have two drives or a hard drive, save to the first one, then click on "Save as..." and change the drive identifier (most easily done with Universal Item Selector or the new Atari Rainbow TOS), make sure the title and subdirectory (folder) are correct and save again. I don't do two saves every single time, but I do it at least once an hour, or especially if I have made many significant changes and certainly before I quit the program.

**4.** *Store one recent backup of a long-term project in a remote location.* There was a story in the local papers a couple of years ago about a man who had been working on his doctoral thesis for five years and was almost ready to submit it. His house, unfortunately, burned to the ground, and along with it, all of his backup disks and a hard copy of his thesis. The man stated he could not re-construct it as his notes and research files were burned also. The lesson to be learned: keep a spare copy at the office, at a friend or relative's house or in a safe-deposit box.

**5.** *Check the number of bytes at the end of the formatting process.* If a single-sided format does not end up with 357,376 bytes available, or a double-sided format with 726,016 bytes, do not use that disk. It will give you problems sooner or later. Try reformatting; if you still don't get the correct number, toss the disk because it has some bad media sectors on it. These numbers pertain to the standard Atari 80-track, nine-sector format.

I have found the formatting programs built into some software or on public-domain disks to be unreliable. The only ones I use are the Atari TOS format, or Twister (START magazine, Summer 1987) when I need a little extra space (400K single-sided or 800K double-sided).

**6.** *Watch your disk-drive light any time you click on something under the File menu.* The light is there to monitor the operation of your disk drive. If the light doesn't come on, you have either: a) a hardware problem (Drive B not turned on, cables not plugged in properly, power supply failure or computer malfunction); b) a human problem (your hand slipped while clicking or you gave the wrong drive identifier); or c) a possible software malfunction.

**7.** *Do not use any one disk for more than one year— make that six months if you use the disk on a daily basis.* The main reason was given at the beginning of this article: disks do die. If the label is getting dirty from your thumb, it's time to remake that disk. Use a brand new disk, format it, then put the date in tiny letters in a corner of the label.

When backing up the disk, do not make a disk copy (i.e., do not drag the A icon over the B icon). Make a file copy by dragging the individual files from the A window to the B window (or your RAM-disk window or hard-disk partition, then drag the files back from the ram disk or hard disk to the freshly formatted disk.)

Backing up your disk this way is important because when you delete a file it leaves a "hole" of unused sectors on the disk. You then save a file that is larger, and the file can't fit in the first empty hole, so the computer divides it into two or more pieces, depending on how many little holes there are. Once it has filled in all the holes, it will write the balance of the file at the end of the disk. After months of this, the files on the disk are all splintered and fragmented into many pieces. The drive time actually slows down looking for all the pieces to a file when loading it. Doing a Copy File reorganizes the file sectors into sequential order for each file, thus restoring the integrity of the files for greater reliability and long-term use.

**8.** *Check your drive speed occasionally.* Most user-groups and BBSs have a drive-speed tester in the public domain. Get one and use it. If your drive is running at 302 RPM or more or at 298RPM or less, have your nearest Atari Service Center adjust it for you. The cost will be minimal. ▶

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# Always back up your disks.

**9.** *Check your disks for viruses.* Get a public-domain virus checker such as George Woodside's VKILLER from the same sources and use it, especially if you get disks from a wide variety of noncommercial sources. Damaged disks are often the end result of a malicious virus.

**10.** *Each directory has a limit of 112 files (items).* Note the number of items at the top of your directory window while at the Desktop. If you save a lot of small files, you can easily surpass the 112-file limit, especially on a double-sided disk. I've yet to see a program that gives a valid error message when you try to save the 113th file to a particular directory. (A directory can either be a folder or the "root directory," when you're not inside a folder.) Create some folders to store similar items and you'll solve the problem. Each folder can also contain 112 items so there's really no limit to the number of files on a disk if you're aware of this situation.

### And There You Have It

I hope the above guidelines help you manage your files more efficiently. I especially hope that they save you from the devastating "aftershock" of losing a valuable file or disk. ■

***Mark Taylor is a salesman for Software 1st of Santa Rosa and is cofounder of ST ACE of Sonoma County, a very active Atari User Group.***


# A further development

Prospero Pascal and Fortran for GEM have long been established as standard programming environments for professional developers using the ST. Prospero C is also gaining wide acceptance as the first ANSI conforming C compiler for the ST.

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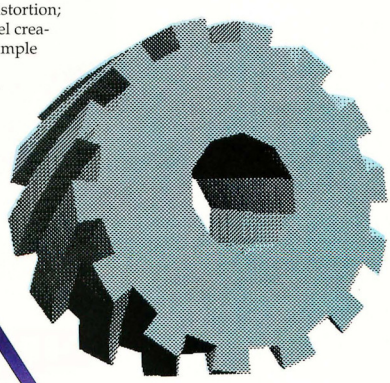

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*by Jim Kent*

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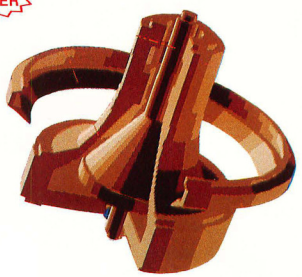

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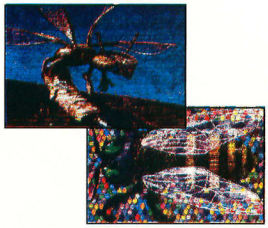

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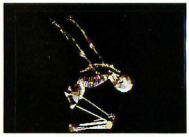

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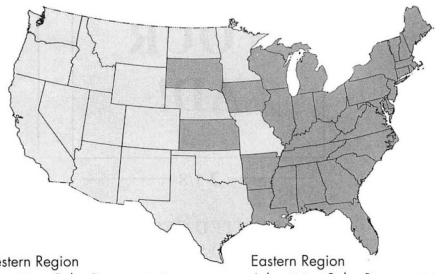

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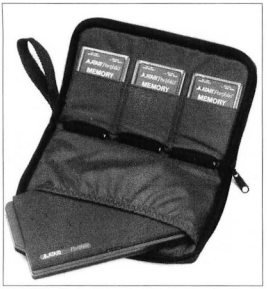
# Products Update

*BY MARTA DEIKE, START JUNIOR EDITOR*

## *Portable Portfolios*

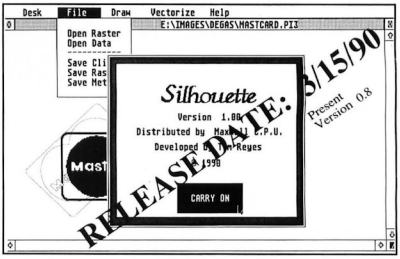
Caseworks has created the PCpouch for Atari's new Portfolio. PCpouch is a carrying case designed to contain the Portfolio, three RAM cards and three AA batteries in a size not much larger than the computer itself. It's available in two types: water-resistant 400 Denier nylon or Glove leather, both with thick foam lining and a one-year guarantee. PCpouch nylon, $24.95; leather, $49.95. **Caseworks, Inc., 4038-B 128th Ave., S.E., Ste. 294, Bellevue, WA 98006, 206/643-7557.**




## *Desktop-Publishing Basics*

Now available from North Light Books i s the comprehensive desktop-publishing manual for artists, **Basic Desktop Design & Layout**. The book includes explanations of basic DTP principles and step-by-step demonstrations of procedures. A variety of projects — from the simple to the complex — are analyzed in terms of design specifics, to teach you how to anticipate and solve special problems you'll be likely to face in your work. Basic Desktop Design & Layout, $27.95. **North Light Books, 1507 Dana Ave., Cincinnati, OH 45207, 513/531-2222.**

**A first for the ST: Maxwell's Silhouettes outlining program.**




## *Maxwell Silhouettes*

Maxwell Computer Products has released the first outlining program for the ST, **Silhouette**. Silhouette produces vector graphic files in the form of GEM metafiles from Degas or IMG raster files. Converting raster files to vector graphic files lets Linotype machines produce the image at high resolution and gives you more flexibility in modifying images — a promising accessory for desktop publishing projects. Silhouette, $49.95 **Maxwell CPU, 5007 W. Baseline, Lafayette, CO 80026, 303/666-7754.**

## *The Caged Bird Sings*

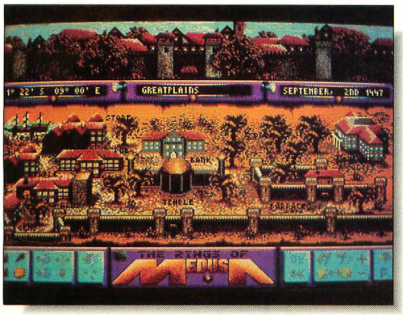
Are you a bird watcher? If you belong to that select Ornithological crowd, WholeLifeSystems has designed a software package specifically for you. **KeSTrel, The Bird Processor** is a record-keeping program that includes customized database features as well as encyclopedic information about species and AOU spellings. It will also compile and print Seasonal Reports for state Ornithological Societies. KeSTrel, The Bird Processor, $39.95. **WholeLifeSystems, Box 162, Rehoboth, NM 87322, 505/853-4751.**

## *New Games from Star*

From the creators of Targhan (reviewed in START, March 1990), Star Games, comes three new releases for the ST. **Clown-O-Mania** is the adventure of Beppo the Clown, who abandons the circus life and sets out to discover a country full of priceless crystal. There are 70 levels of riddles and tasks, 3D screen construction and soft-scrolling in all directions. Clown-O-Mania, $34.95.

**Table Tennis Simulation** offers you the chance to prove you haven't lost that swing you had against your Aunt Sallie on her table in the backyard. You can train against a ball machine or computer player before you take on friends and neighbors and, ultimately, on the World Championship level. Table Tennis, $34.95.

The classic heroic quest awaits you in the **Rings of Medusa**, in which you play the young prince who must conquer the evil Medusa and restore peace and order to your father's kingdom. Your only chance against this hydra-headed madame is to find the five rings and unite them in the temple of the Athenians. There are thirteen castles in 33 cities on three islands and you must confront myriad evil through it all. Rings of Medusa, $49.95. **Star Games, 708 W. Buffalo Ave., Ste. 200, Tampa, FL 33603, 813/222-0006**.

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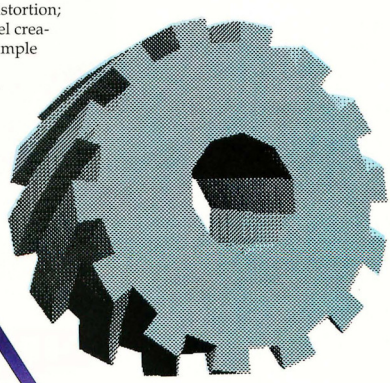

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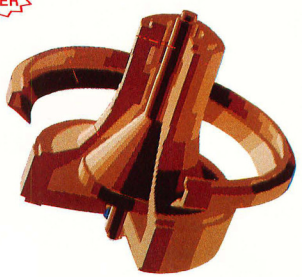

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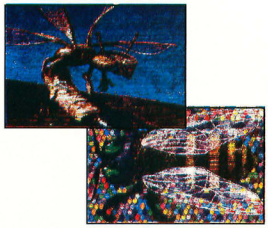

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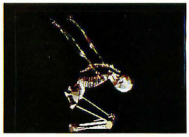

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