

"People are really hungry to understand what they should be doing on a personal level," he explains. "Diet is a very individualized thing."

Nutrition Expert analyzes your diet for carbohydrates, protein, fat, sodium, cholesterol, amino acids, and various vitamins and includes a 500-food database that you can personalize by adding your favorites.

Barney says the program is easy to use and adapts to your changing needs. Once you reach your weight loss goal, you can redesign your profile to develop a maintenance program.

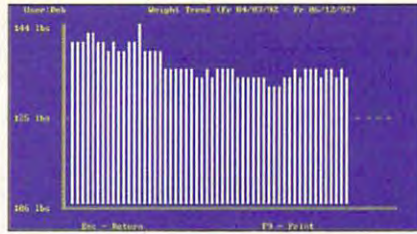
Only a combination of good nutrition and fitness habits will lead to better health, Harnad believes, so he developed another program, Training Expert, to help you plan a fitness routine.

Training Expert compiles a personal profile based on your height, weight, and training goals and prescribes a customized workout designed from 75 varied fitness routines.

Both programs—designed to be used together—include graphic features to help track your progress.

### Searching for Discipline

Craig Leonard, a technical sergeant with the 114th Fighter Squadron in the Oregon Air National Guard, had trou-



Diet Balancer charts your progress.

Diet		Fruits	
Date	1 Month	1 Month	1 Month
10/1	11.2	0.4	0.1
10/2	10.7	0.1	0.1
10/3	10.2	0.1	0.1
10/4	9.8	0.1	0.1
10/5	9.4	0.1	0.1
10/6	9.0	0.1	0.1
10/7	8.6	0.1	0.1
10/8	8.2	0.1	0.1
10/9	7.8	0.1	0.1
10/10	7.4	0.1	0.1
10/11	7.0	0.1	0.1
10/12	6.6	0.1	0.1
10/13	6.2	0.1	0.1
10/14	5.8	0.1	0.1
10/15	5.4	0.1	0.1
10/16	5.0	0.1	0.1
10/17	4.6	0.1	0.1
10/18	4.2	0.1	0.1
10/19	3.8	0.1	0.1
10/20	3.4	0.1	0.1
10/21	3.0	0.1	0.1
10/22	2.6	0.1	0.1
10/23	2.2	0.1	0.1
10/24	1.8	0.1	0.1
10/25	1.4	0.1	0.1
10/26	1.0	0.1	0.1
10/27	0.6	0.1	0.1
10/28	0.2	0.1	0.1
10/29	0.0	0.1	0.1
10/30	0.0	0.1	0.1
10/31	0.0	0.1	0.1

Diet Balancer tells what's good for you.

ble finding the discipline to maintain his weight at military standards, so he turned to his computer and DietPro by Lifestyle Software Group. Leonard finds that it's hard to cheat when you have to account daily for every morsel of food you eat.

"I have problems maintaining my discipline, [but] I've found that this program really works," Leonard says. "I've made recommendations to the

medical hospital at the base to include [DietPro] in its library for anyone who is having problems [with weight control]."

Every morning, Leonard uses the program to plan his day, and each evening, he makes sure that everything he ate is listed in the computer. At the end of each week, he prints a compilation of his exercise and eating habits for that week. He checks his progress and can tell what nutrients he lacks or where he has over-indulged.

DietPro analyzes 36 nutrients in more than 5000 foods from the Department of Agriculture's food list and from fast-food chains. You can also enter your own foods and recipes, an option that Leonard enjoys.

"It's a pretty powerful option," he says. "Not everyone consumes everything, so to be able to [analyze] your own recipes is useful."

DietPro also offers an extensive list of activities and allows you to develop a fitness plan based on your own personal profile.

"You have to take the average ...profile with most programs," Leonard explains, "but with DietPro, if you have a low metabolism, you can adjust the program to account for that."



## from Canada to England to Florida...

Our lineup currently includes:

- Troon North
- Pinehurst
- Firestone
- Mauna Kea
- Dorado Beach
- Banff Springs
- Barton Creek
- The Belfry
- Bayhill Club
- Innisbrook
- Bountiful
- Pebble Beach®

All LINKS Championship Courses are completely compatible with and require LINKS—the Challenge of Golf®, Microsoft Golf®, OR LINKS 386 Pro™ to operate. From mountains or beaches, from across the sea or on the islands—happy golfing from ACCESS!



ACCESS Software, Inc. 1-800-800-4880  
4910 W. Amelia Earhart Dr., Salt Lake City, UT 84116



## Scared Healthy

For some, weight loss goals may be dictated by health, not just a desire to look and feel better. That's how Dieter's Edge 2000 was born.

"Seven years ago, my doctor scared me into a diet, and I lost 60 pounds," says Fred Shadko, developer of this program. "I wrote a little program to help me with that. When I showed it to other people, they were also interested."

Distributed by LivingSoft, Dieter's Edge 2000 can help you balance your intake of protein, fats, and carbohydrates as well as achieve targeted minimums and maximums of cholesterol, sodium, fiber, vitamins, and other food components. The program has a database of more than 2000 items, including products from seven fast-food chains.

One unique capability of the program is that it can determine your personal break-even point based on how your body reacts to your diet and exercise in a 30-day period, Shadko says. Your break-even point is the number of calories that your body needs to maintain your current weight and activity level. Once you have determined this, you can adjust your calorie intake to safely lose weight.

Evelyn Richards, a retired Xerox salesperson, used Dieter's Edge 2000 for nearly five months and lost about 40 pounds. She found that entering her personal data was fun.

"It got to be kind of a game," Richards explains. "It was very motivational to see the numbers change and the graphs come up and to see how I was doing. I looked at the graphs daily because I set daily goals."

Entering this personal nutrition and fitness data was also a motivational factor for certified financial consultant Rusty Welch, who has written off nearly 30 pounds using Dieter's Edge 2000. Learning about the nutritional content of his favorite foods was also re-

warding, he says.

"I had previously just counted calories, and this really opened my eyes to overall nutrition," Welch explains. "It was a real education."

To help you stay within the nutritional boundaries you've established, Dieter's Edge 2000 also includes a treat feature, which will calculate the allowable portion size of any food you want to eat. For example, if you crave a hot-fudge sundae, this program will tell you what size sundae you can eat without blowing your diet.

"The single biggest hazard is people getting discouraged," Shadko explains, "so we give them the ability to have a treat."

## Reversal of Fortune

As a pediatrician, Dr. Fackler understands the importance of good health, but two years ago, his was questionable. Since then, Fackler has adjusted his lifestyle, using Parsons Technology's Diet Analyst. He has reached his personal weight goal, lowered his cholesterol from about 240 to 180, and reversed the clogging of one artery.

"It's not a diet program; it's a lifetime eating program," Fackler says. "It has taught me to select the healthy foods and ignore the others. This is the first program that I have been able to stick with."

Diet Analyst helps you manage your health program by tracking 26 nutrients from a database of 1700 foods, including brand-name products and menu items from 13 fast-food chains. You can also monitor your exercise

*ExerCitement from Computer Athlete turns exercise into an arcade game.*

regimen and generate a variety of reports, such as an exercise log, an account of your current nutritional status, and a compilation of the data for a single day or a number of days.

Fackler uses his Diet Analyst twice each day for about five minutes. He records everything he eats—even the binges and mistakes—so that he can accurately determine how he's doing. Fackler also recommends the program to his older patients and their parents.

## Nutrition Counts

As a personal trainer, Tona Hilwig recommends ways to help clients develop a personal weight loss program. Diet Balancer by Nutridata Software helps her clients understand the nutritional content of foods, she says. It teaches them to think about what they eat and how they can maintain a healthy diet.

Diet Balancer tracks 26 nutrients, including calories, fat, cholesterol, and fiber, and has a database of more than 1700 foods, including products from 13 fast-food chains. You can also add your favorite foods to the database. If you must minimize certain things in your diet, such as fat or sodium, Diet Balancer can help you plan meals. The program also includes a selection of prepared menus.

One feature that is important to Hilwig and her clients is the graphic section that can track your performance for up to 60 days.

"The charts show them what they should be doing and how they are progressing," she explains, speaking of her clients. "It helps them see how close they are to their goals."

## Reach Your Goal

Once you've reached your weight loss goal, these software products can help you maintain a healthy lifestyle.

Sharon Brehm began using Diet Expert by Expert Software to help maintain her weight and plan a healthier diet. Through the program, she has learned the fat and nutrient content, as well as the caloric value, of different foods.

Diet Expert's database lists the nutritional content of 2300 foods and can help you track items that you may be trying to avoid, such as sugar, salt, and cholesterol. The program analyzes your current diet for 30 nutrients to help you overcome excesses and deficiencies, and it analyzes your current fitness plan to develop an exercise regimen based on your age, sex, weight, and frame.

"I liked the low price and flexibility of the program," Brehm says. "If you just wanted to plan a few meals, you could



Longevity Magazine's Workout Videos For An Ageless Body

# REJUVENETICS.



**SHE'S 55!** Kathy Keeton, the publisher and president of *Longevity* magazine, stars in **REJUVENETICS** and **MORE REJUVENETICS**. These two new video workouts are specifically designed to slow down the effects of aging on the body and actually turn back the biological clock for a stronger, more youthful body. **REJUVENETICS** features non-aerobic ballet, t'ai chi, and yoga movements. **MORE REJUVENETICS** concentrates on body sculpting specific muscle groups to build lean body mass while speeding up the metabolism. Follow either 30-minute program just three times a week for satisfying results without the stress and strain of aerobics. Only **\$14.99** each.

Call **800-527-2189** and ask for Department R, or send \$14.99 plus \$3.50 (\$8.00 outside U.S.) shipping and handling for each video to: Best Film & Video Corp., Dept. R, 108 New South Road, Hicksville, N.Y. 11801.

## Sim City 2000 Design Contest

Maxis and COMPUTE Publications are looking for the very best, original cities designed with the new Sim City 2000 from Maxis. All winning cities will be included on one of COMPUTE's Winning Cities Disks. Each winner will receive \$50 plus a software package from Maxis and a game hint book from COMPUTE. So put on your city manager's hat and design your best cities.

Interested? If so, read on:

### Official Rules NO PURCHASE NECESSARY

1. Entries must be your original work and never have been distributed by electronic means. All winners will be required to affirm this in writing.
2. Submit as many entries as you want, but we cannot consider cities which have been distributed on disk or are available on any BBS or commercial telecommunications service such as CompuServe or America On-line.
3. All entries must be received no later than April 1, 1994. Print your name, address, daytime phone, and social security number along with your disk to Sim City 2000 Contest, COMPUTE, 324 West Wendover Avenue, Greensboro, NC 27408.
4. Entries must be created with either the MS-DOS or Macintosh versions of Sim City 2000. Cities created with the original Sim City will not be accepted. Entries may be submitted on either a Macintosh 3-1/2 inch floppy disk or a MS-DOS 3-1/2 inch or 5-1/4 inch floppy disk. A separate copy of this entry form must be submitted for each city submitted. Readable photocopies of this entry form are acceptable.
5. The staff of COMPUTE magazine will handle the judg-

ing. The decisions of the judges is final as to all aspects of any entry, including similarity to any entry. There will be at least five winners, but there can be as many as twenty winners depending on the quality of the entries. Winners will be selected on the basis of their originality, uniqueness, complexity, balance, general appeal and use of the new features in Sim City 2000.

6. Winners will be notified by mail by September 30, 1994.

7. The contest is opened to residents of the United States and Canada, except Quebec. Full-time, part-time & previous employees of COMPUTE Publications International Ltd., General Media International Ltd. and Maxis, their immediate families and their advertising agencies, are ineligible for the contest.

8. Contestants must assign the copyright in their entries to COMPUTE using the attached form. All winning entries become the property of COMPUTE Publications International Ltd. Sorry, we cannot return any entries.

9. The approximate value of each of the prizes awarded is as follows: software \$50, hint book \$15, and cash \$50.

10. This contest is void where prohibited or restricted. All winners will be required to submit an affidavit of eligibility, including permission to use winners name and photo for promotional purposes without further compensation; failure to return this affidavit within ten days will forfeit prizes. Neither COMPUTE nor Maxis is responsible for delayed or misdelivered mail. Taxes are winners responsibility. No alternative prizes or cash equivalents of prizes will be awarded.

### Every Contestant Must Fill in and Sign This Form:

Name of Your City \_\_\_\_\_  
Your Name \_\_\_\_\_  
Street \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Macintosh or DOS (Circle one)

I hereby warrant and represent, knowing that COMPUTE will rely thereon, that: I have read, understand and agree to be bound by the Official Rules and each term and condition thereof; that the city presented on the enclosed disk is my own original work, has not been submitted elsewhere nor made available for distribution on any BBS, commercial telecommunication service, shareware disk or any other general distribution whatsoever, and that I have the sole right to assign the copyright and all other rights in it to you. I am 18 years old or older and of lawful age to sign this contract in my state or if I am a minor my parent or guardian's consent is attached below.

### ASSIGNMENT OF COPYRIGHT

In consideration of the opportunity to enter this contest and win the prizes offered, I hereby sell, transfer, assign and convey to Compute Publications International, Ltd., all right, title and interest I possess in and to the above-titled work (the "city"), including, but not limited to, the copyright and all renewals and extensions thereof in the United States of America and all countries of the world and any and all claims or causes of action whether asserted or not relating thereto.

SIGNED: \_\_\_\_\_

Parental Consent  
(complete this section if minor is named above)

I, \_\_\_\_\_, hereby certify that I am the parent or legal guardian of the above-named person who is a minor below the age of 18 and that I ratify and consent to the execution of this entry form by such minor and to the use of his/her name and likeness for promotional and commercial purposes should he/she be selected as a winner.

SIGNED BY PARENT OR  
GUARDIAN: \_\_\_\_\_  
ADDRESS IF DIFFERENT FROM ENTRANT: \_\_\_\_\_

## SPEAK UP!

Is there a feature topic you'd like to see covered in COMPUTE?

Let us know by calling

**900-285-5239**

(sponsored by Pure

Entertainment,

P.O. Box 186, Hollywood, California 90078). The call will

cost 95 cents per minute,

you must be 18 or older,

and you must use

a touch-tone phone.

use it for a few days, but if you wanted to drastically change your eating habits, you could plan meals for up to a year."

### Monitor Your Progress

Other software programs that help monitor your progress toward better nutrition and fitness include NutritionPro by ESHA Research; Santé by Hopkins Technology; Nutri-Calc by CAMDE; NutriBase by CyberSoft; and Diet Simple, Diet Simple Plus, and Diet Easy by N-Squared Computing.

NutritionPro calculates the nutritional values of 2000 foods and can track excesses and deficiencies in your diet. You can also plan a fitness workout cycle from a database of 110 fitness activities. NutritionPro is also available in a scaled-down student version.

Santé monitors your progress by analyzing your food intake for 30 nutrients. It maintains a database of 3000 foods. The program also determines your daily calorie need based on a personal profile and can help you develop a weight loss plan. Colorful charts and graphs display suggested caloric and nutrient breakdowns based on the most recent government recommendations.

Nutri-Calc assesses foods and recipes for 30 components and compares the results to U.S. recommended daily allowances or your own dietary goals. The program comes with a database of 1600 foods, including fast foods and prepared foods, and you can add your favorite foods and recipes. You can also buy an additional food database that includes 1800 more listings. One of Nutri-Calc's advantages is that it will display ratios such as calcium to phosphorus or polyunsaturated fat to saturated fat.

NutriBase, an unusually comprehensive diet tracker, lists the nutritional content of more than 30,000 foods,

## Fitness I/O

Although you know that exercise is a necessary component of weight loss, does the thought of spending endless hours doing the same mindless routines with the same old fitness equipment discourage you? Your computer can put the spark back into your exercise routine with programs from Computer Athlete and Computer Directions.

ExerCitement by Computer Athlete links your exercise equipment and home computer to create an arcade-game fitness program. ExerCitement is compatible with all brands of exercise bikes, stair-climbing machines, treadmills, cross-country ski machines, and rowing machines. There are only two requirements: Your exercise equipment and your computer must be located in the same room, and your computer must have a game port.

You control the game with two directional buttons attached to the machine by Velcro; a photoelectronic eye and a reflector measure your speed. A 12-foot cable connects your computer's game port to the exercise equipment base and communicates your movements to the computer.

As you start exercising, you become a contestant in a race where your motions directly correspond to those of the computer athlete. The program has five different race sequences (one for each of the machines mentioned above). For example, you could cycle down a winding road, row through open waters, or bound across the craters of an alien planet—the race scenario used with the stair-climbing machine. However, you can choose any game, regardless of the equipment you own. Besides choosing the game you play, you can also designate the speed of the race; it can be set fast enough that even expert arcade players are challenged.

You score points in each race by dodging obstacles, avoiding menacing characters, and demolishing your opponents. For every 1000 points earned, you move to the next

level and a new world.

ExerCitement runs off a floppy disk and requires 512K of RAM. For more information about the program, contact Computer Athlete at 5193 Betonywood Place, Dublin, Ohio 43017, or call (800) 860-4506. ExerCitement sells for \$129.95 and includes all the hardware you need to run the program.

If you prefer getting out on the aerobics floor for exercise, Fitness Partner, developed by Computer Directions, is a CD-ROM that can help you design your own exercise routines.

When you begin, the computer will create your personal profile based on your sex, age, fitness level, and weight loss or muscle-toning goals. Then the computer automatically selects from 75 full-motion video exercises to design your workout, setting the speed and number of repetitions for each exercise. Fitness Partner can design up to nine routines, one for each day of the week and two alternates, for up to ten users.

Fitness Partner also lets you custom-design your own workout. You can choose exercises for the warmup, workout, and cool-down sections; pick the style of background music; and set the speed and number of repetitions for each individual exercise.

Roni Smaldino, a certified aerobics instructor, leads you through each routine, providing audio coaching and words of encouragement. If you don't understand a particular exercise, you can stop the workout and go to the learning mode for a personal demonstration.

Fitness Partner requires a multimedia-compatible computer, including a CD-ROM drive, VGA-plus color capabilities, a digital sound card, and Windows 3.1 or higher. Fitness Partner lists for \$69.95. For more information about this CD-ROM product, contact Computer Directions at 2712 West Shaw Avenue, Suite 234, Fresno, California 93711, or call (800) 600-2348.

including the offerings of 44 national chain restaurants.

N-Squared Computing usually develops programs for professional use but has also produced three scaled-down programs for use by individuals. Diet Simple, Diet Simple Plus, and Diet Easy each contain a

database of 2025 foods (other versions of Diet Easy listing 5000 and 8500 foods are also available).

Diet Simple tracks 28 components in the foods you select and graphs the results by the percentage of the U.S. recommended daily allowance that is satisfied. Diet Simple Plus, an extension

Psychotic Killers.

Hand-To-Hand  
Combat.

High Explosives.

Acid Baths.

Then It  
Gets  
Bad.

CRITICAL PATH

Kat, chopper pilot— turned survivalist, has only one hope for escape from Generalissimo Minh's maximum security facility...You. Guide Kat along the Critical Path, through scene after scene of killers, mutants, traps and high-explosive surprises. It's a gritty, realistic cinematic experience!

"This isn't a game...they're going to KILL me!" From your fully-equipped control center, you share Kat's view via a camera mounted on her headset. Action bursts forth on your screen with lifelike 3D motion video, explosive sound effects and music soundtrack! Warn Kat of fast-approaching dangers. But if you slip up... it's "Game Over"! Sign up for combat duty at a software dealer near you.



**MEDIA VISION**

Circle Reader Service Number 185

**WINDOWS™**  
**CD-ROM**

Call 1-800-845-5870 for information or a dealer near you. © 1993 Media Vision, Inc., 47300 Bayside Parkway, Fremont, CA 94538. Fax (510) 770-8592.

Media Vision, the Media Vision logo and Critical Path are trademarks of Media Vision, Inc. All other trademarks are those of their respective companies. All rights reserved.

 [www.media-vision.com](http://www.media-vision.com)

## Fit Products

Nutri-Calc—\$39.95  
 Nutri-Calc Expanded Foods Database  
 (additional 1800 foods)—\$19.95  
 CAMDE  
 449 E. Saratoga St.  
 Gilbert, AZ 85296  
 (602) 926-2632

NutriBase—\$69.95  
 CYBERSOFT  
 3851 E. Thunderhill Pl.  
 Phoenix, AZ 85044-6679  
 (602) 759-4849

NutritionPro—\$79.00  
 NutritionPro (Student Version)—  
 \$29.95  
 ESHA RESEARCH  
 P.O. Box 13028  
 Salem, OR 97309  
 (503) 585-6242

Diet Expert—\$14.95  
 EXPERT SOFTWARE  
 800 Douglas Rd., North Tower  
 Ste. 355  
 Coral Gables, FL 33134-3128  
 (800) 759-2562

Nutrition Expert 2.0—\$79.99  
 Training Expert 2.0—\$79.99  
 (\$139.98, if purchased together)  
 FITNESS SOFTWARE SYSTEMS  
 P.O. Box 160  
 Willington, CT 06279  
 (203) 429-2519

Santé—\$59.95  
 HOPKINS TECHNOLOGY  
 421 Hazel Ln.  
 Hopkins, MN 55343-7116  
 (612) 931-9376

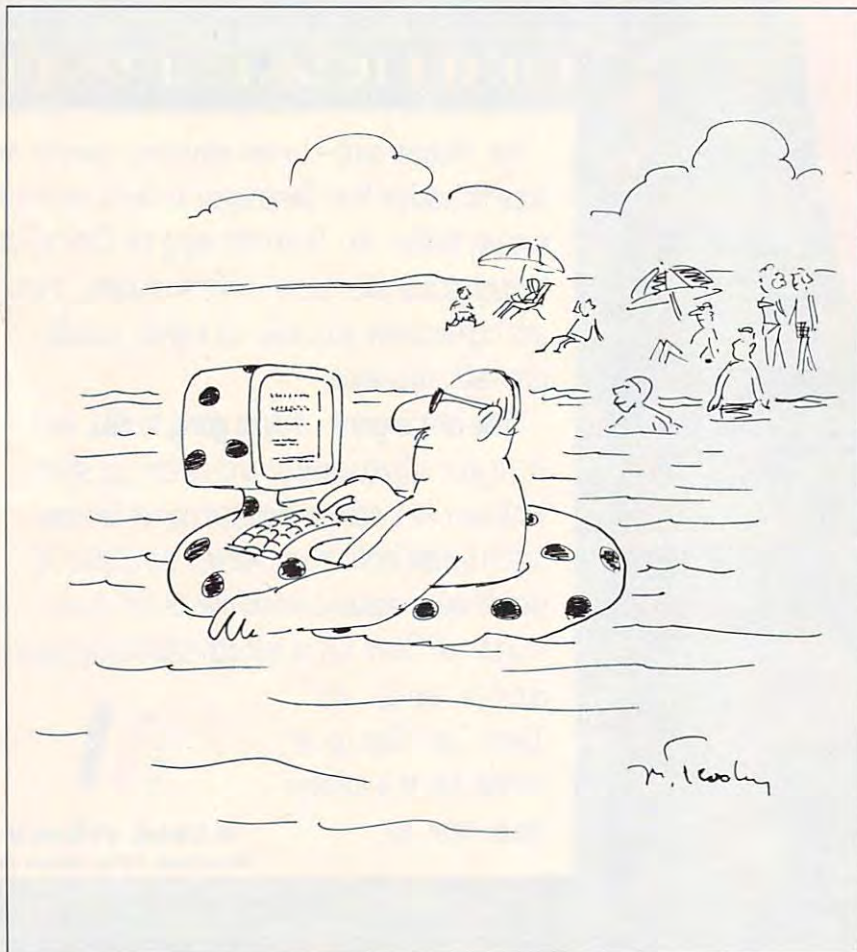
DietPro (for DOS)—\$39.95  
 DietPro for Windows—\$59.95  
 LIFESTYLE SOFTWARE GROUP  
 63 Orange St.  
 St. Augustine, FL 32084  
 (800) 289-1157  
 (904) 825-0220

Dieter's Edge 2000—\$79.95  
 LIVINGSOFT  
 711-700 Pine Acre Rd.  
 Janesville, CA 96114  
 (800) 626-1262  
 (916) 253-2700

Diet Simple—\$25.00  
 Diet Simple Plus—\$49.00  
 Diet Easy 2000  
 (2025-food database)—\$49.00  
 Diet Easy 5000  
 (5000-food database)—\$249.00  
 Diet Easy 8500  
 (8500-food database)—\$349.00  
 Nutritionist III—\$495.00  
 Nutritionist IV—\$495.00  
 N-SQUARED COMPUTING  
 3040 Commercial St. SE, Ste. 240  
 Salem, OR 97302  
 (503) 364-9118

Diet Balancer 3.0—\$59.95  
 NUTRIDATA SOFTWARE  
 P.O. Box 769  
 Wappingers Falls, NY 12590  
 (800) 922-2988  
 (914) 298-1308

Diet Analyst 2.5—\$59.00  
 PARSONS TECHNOLOGY  
 P.O. Box 100  
 Hiawatha, IA 52233-0100  
 (800) 223-6925  
 (319) 395-9626



of Diet Simple, tracks 58 items. Both programs also include text explanations and recommendations to help you overcome deficiencies and excesses.

Diet Easy creates menu plans, tracks your progress, and maintains a database of your favorite recipes. It also helps you create weight loss and exercise plans and can generate graphical printouts. N-Squared also makes diet programs Nutritionist III and Nutritionist IV for use by professional dieticians.

### Dedicate Yourself

Although tracking every crumb of food that you consume and every movement that you make in your fitness routine may seem tiresome, dedication is the key to success with these software programs. As with any traditional weight loss program, hard work is the primary requirement—but your computer can help make the struggle easier.

"I've probably got umpteen calorie-counting books, but when you can sit down at the computer and enter what you've eaten, it's much simpler," says Jennifer James Chadwick, who is halfway to her goal of losing 20 pounds with the help of Dieter's Edge 2000. "It's so painful with the calorie-counting books, but it's much less painful with the computer. The hardest part is to overcome human nature. You have to make yourself be consistent." □

...Santa behind schedule...  
...unexplained delay...  
...Rudolph frantic...



Bring a Lemming  
home for the  
Holidays!

Circle Reader Service Number 227

If you can't find our great games at your favorite retailer, call: 1(800) 438-7794 (GET PSYG) to order your copy today.

Lemmings™ products are sold at Radio Shack® and other fine software stores.



Psygnosis

675 Massachusetts Ave.  
Cambridge, MA 02139

[www.computerspie.com](http://www.computerspie.com)

# USA™

SubLOGIC has carved a unique market niche as the sole publisher of aviation edutainment software. Our simulation technologies have been bringing flight into the home since 1977. Let us introduce you to the TOTAL FLIGHT EXPERIENCE.

Simulation features like high fidelity flight dynamics, special flight graphics and sound, verbal and visual guidance systems, locator and facility control menus, and a structured flight assigner give you an extremely rewarding flight experience. Our user friendly software guides you from takeoff, through easy visual and radio enroute navigation, to a successful landing at your destination.

Two separate sets, USA East and USA West, cover the eastern and western sections of the country. Together they give you comprehensive visual scenery coverage of the entire United States plus every paved public-access airport, nav-aid and instrument approach. A continuous flow of cities, airports, rivers, highways and railroads (the entire national infrastructure) makes flying a breathtaking experience. Our colorful, comprehensive maps are a SubLOGIC trademark.

USA (also for Great Britain Scenery Collection). All you have to do is specify a time frame and difficulty level, select a flight, and print a copy of your flight log. Spoken Air Traffic Control messages come alive nationwide (with ATP or Air Force and optional SoundBlaster sound card).

USA East and USA West are available for \$69.95 each.



*SubLOGIC - Dedicated to bringing you the total flight experience!*

All SubLOGIC flight simulations, and Microsoft Flight Simulator, can be greatly enhanced with the USA add-on.

## USA

USA integrates three products in one coordinated package; a structured flight assignment system, a comprehensive scenery management system and, of course, a nationwide scenery platform.

USA's scenery management system provides instant inflight information about or relocation to any airport or nav-aid facility. Navigation aid symbols can be turned on or off as desired to help you visualize the location of all radio nav-aids. Huge floating traffic patterns and runway approach arrows guide you down to a safe landing at the destination airport.

The automatic flight assignment system designs structured flights for

## Flight Simulations

Our aviation dedication is demonstrated in two low-priced simulations. Many flight sim developers have abandoned the general public to create new products specifically for the latest high-end, ultra-fast machines. Our simulations can run optimally on family-oriented 16MHz through 33MHz computers. We've also taken extra effort to ensure that





*Colorful Comprehensive Maps  
are a SubLOGIC Trademark*

8MHz 286 and top-end users alike will enjoy the SubLOGIC flight experience.

### *Flight Light*

No more "Oh, I tried it before and I crashed!"

Introducing Flight Light, a simple yet full-featured flight simulation designed to give you a fun and successful flight experience. Fly your Cessna jet along flight corridors from New York to Boston, Chicago/Champaign, Los Angeles/San Diego, and now Dallas/Austin. A practice flight mode makes it impossible for you to crash. Pitch/power visual cues show you what

settings to use to climb, cruise, descend and land. A second window view can lock onto your destination airport or onto the all-important horizon. Visual track-to-destination arrows, traffic pattern indicators and radio nav-aid markers can be turned on or off any time. Program features are organized under a brand new menu system that offers context-sensitive help.



Our devotion to bring aviation to the world inspired us to release Flight

Light at the ultra-low price of \$29.95, so you can get one for yourself or stuff the world's Christmas stockings.

Traffic Control guide the aircraft from takeoff to touchdown (with SoundBlaster sound card). When you're ready to earn your wings as an Airline Transport Pilot, take the controls and fly any of hundreds of predefined flight assignments.



*USA Night Flight*

ATP's proprietary Air Traffic Control system\* really excels when used in conjunction with USA. The combination of ATP with USA is such a natural, we've decided to include the ATP simulation on the CD-ROM version of USA East/West. This combo package will keep you flying to new places for many years to come!



*VOR and ILS Nav-Aid Symbols*

All products available for IBM/compatibles. See your dealer, or feel free to call our friendly and knowledgeable staff at 800-637-4983 for additional information.



*Midway Airport and Map View*

### *Flight Assignment: ATP*

The renowned complete jet airliner simulator, now available for a low \$44.95. Sit back and watch the ingenious autoflight mode fly a Boeing 737 or any of four other heavy transport aircraft across the country. Listen to the voice of Air

Flight Assignment, Flight Light, and Scenery Collection are trademarks of SubLOGIC. \* ATP system patent pending. All other products and brands are trademarks or registered trademarks of their respective owners.

*the Computer Flight people*

**subLOGIC**

TELEPHONE: (217)359-8482

FAX: (217)352-1472

ORDER LINE: (800)637-4983

© 1991 Commodore Service Number 178 [www.commodore.ca](http://www.commodore.ca)



*New York City at Dusk*

# The Patrician

My precious A. Scon

Heavy winds and pirate attacks keep me from you longer than planned. Fear not about W. Arblay, I know many things about him he would rather were left unsaid... The town council shall elect me Mayor, from where I shall rise to Alderman of the whole Hanseatic League! With this letter is a picture of a ship I bid successfully for. Enough of politics and business! How the days until our marriage, I return from Hovgorod bearing a gift of beautiful furs that you might wrap them round your slender, smooth young body.

With Passion Patrician

My beloved Patrician  
Since I saw you last, we hear rumours that you meet in ornate backrooms of alehouses frequented by pirates who sell arms. Are you mad? Do you know not of my father is so upset he threatens to cancel the wedding. You won't lose just the dowry... the council will not support a man who breaks the laws of God, no matter how much aid you have given the church and the poor. I am so vexed - I must see you soon.

A. Scon

My beloved Patrician

I write with urgency to tell you the which is stricken with the plague already your trading must have gone back to me that we might retort the heat of our passion and advance the marriage plans. Further bad news... recently, a certain W. Arblay has begun business in the town and claims he will be Mayor, not you! The miserable cur! On your return you should be advised to throw a huge feast for the townfolk.

With Love  
A. Scon

The Patrician is an epic saga of power and money set in medieval Europe. Trading and strategy are key to taking your rightful place in the Hanseatic League - the most powerful group of highly organized traders who transformed international trading in the middle ages.

In your pursuit to become a member of this social elite, you begin your climb to the top maneuvering your status from humble merchant to elected Mayor and ultimately Alderman. But the road to the top won't come easily, with bribery, blackmail, lavish feasts and financial "donations" becoming your tools.

As the Patrician (an ancient Roman aristocrat) you'll travel the high seas visiting sixteen seaport towns, each with different trading potential. Be careful though, your expedition will find you confronting pirates and using the primitive but devastating weapons of the time. Every decision you make has a bearing on what happens later, so you must be a skilled strategist in all aspects of your life, including personal relationships.

Complex, involving and addictive, you'll find The Patrician is in a league of its own!

ASCON

READYSOFT

ReadySoft Incorporated  
30 Wertheim Court, Suite 2  
Richmond Hill, Ontario, Canada L4B 1B9  
Tel: (905) 731-4175 Fax: (905) 764-8867

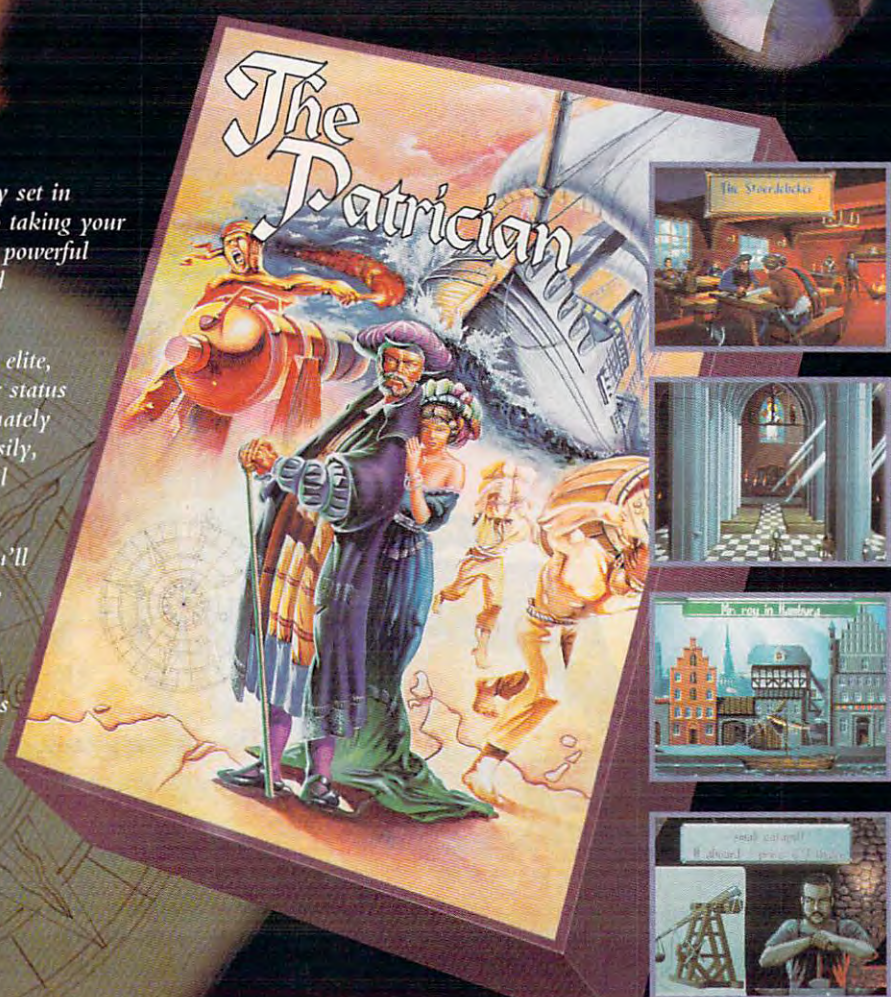
Available for IBM PC, Amiga & PC CD-ROM

Circle Reader Service Number 251

Distributed by ReadySoft Incorporated

©1993 Ascon Ltd.

www.readysoft.com





# DESKTOP VIDEO FAST FORWARD LURCHES AHEAD

BY DAVID ENGLISH

**W**hen Microsoft's Video for Windows was released, many industry pundits predicted a revolution in desktop video. A year later, most computer users aren't even aware of Video for Windows. So what happened?

Too few people are buying Video for Windows or the video input cards that let you bring video clips into your computer. There seem to be two reasons for this. First, as originally released, the program pretty much restricted you to a stamp-sized video image (160 pixels x 120 pixels). It's hard to get excited about video images so small you can barely see them. Second, the actual video files take up a huge amount of space on your hard drive. Even compressed, a 30-second video clip takes up about 4MB—and that's at the 160 x 120 size and a slightly jerky 15 frames per second. So is it time to declare the revolution over, even before it begins?

Some revolutions take time and occur quietly, almost without notice. The main effect of this quiet revolution has been on CD-ROM titles. If you have a CD-ROM drive and regularly try out new titles, you probably have the drivers for Video for Windows and QuickTime for Windows without even knowing it. Many of the CD-ROM titles released in 1993 (and an even larger percentage of those scheduled for 1994) are using video clips. When you install one of these CD-ROMs, you receive the playback drivers for the video clips, but you don't get the video capture utilities. The video input cards include the video capture utilities, so there's no longer any reason to buy the Video for Windows package.

The PC industry is making real progress in overcoming desktop video's too-small image size and too-large storage requirements. You can buy several video input cards (Creative Labs' VideoSpigot, Media Vision's Pro MovieSpectrum, and Intel's Smart Video Recorder) that let you work with 320- x 240-pixel video clips. Cards that offer the Holy Grail of full-screen video (640 x 480) are still expensive but are quickly falling in price. Sigma Designs' \$449 ReelMagic card, which should be available by the time you read this, will boast full-screen

playback with MPEG compression—but has no provision for recording video.

What else is needed to bring you and me into this new world of desktop video? Powerful but easy-to-use video-editing programs. The first two of what will be many such programs are Adobe Premiere (Adobe, 415-961-4400, \$295) and MediaMerge (ATI Technologies, 416-882-2600, \$295). Both let you combine video clips with a variety of special effects and save the result as a new video file.

Adobe Premiere 1.0 is a subset of the highly respected Adobe Premiere 3.0 for the Macintosh, which offers a larger set of professional features for a hefty \$795. The

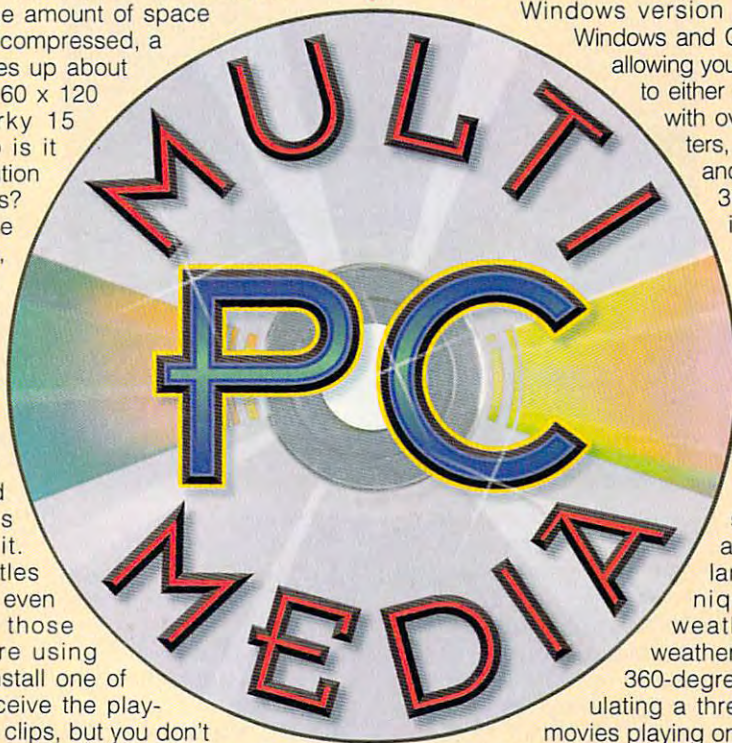
Windows version supports both Video for

Windows and QuickTime for Windows files, allowing you to mix the formats and save to either format. The program comes with over 35 image-processing filters, including antialias, emboss, and sharpen edges, as well as 35 effects and transitions, including cross-dissolve, zoom, and venetian blinds.

Even though it doesn't have all the features of the Macintosh version, the Windows version is still a powerful program. The manual shows you how to insert one video image into another (for a picture within a picture), superimpose a person against a background (similar to the Chroma key technique used to place a TV weatherperson in front of a weather map), and even create a 360-degree video presentation (simulating a three-dimensional space with movies playing on each of five walls).

Compared to Adobe Premiere, MediaMerge is easier to use, but that's mainly because it offers fewer features. For example, MediaMerge offers only nine transitions—though you can alter their direction, color, and duration. In its favor, MediaMerge offers a separate WAV file audio editor, an integrated text animator, and a CD-ROM full of videos, animations, sounds, photos, and backgrounds that you can use in your video productions.

With a new generation of cards that offer full-screen video and with powerful editing programs such as Adobe Premiere and MediaMerge, desktop video should finally arrive for the PC—a bit late for the revolution, but just in time for [www.commodore.ca](http://www.commodore.ca)





## MULTIMEDIA PC

By Richard O. Mann

If you haven't already bought a CD-ROM drive for your PC, chances are that you'll buy one soon.

Market researchers estimate that over 6 million CD-ROM drives will be sold in 1993 and a staggering 18 million will be sold in 1994. If you're one of the 18 million who'll be buying in 1994, you've got some homework to do. If you buy a drive to work with your existing sound card, you'll face the whole lineup of drives; if you buy it as part of a multimedia kit, your choices will be more limited. Even if you buy your drive as part of a kit, you'd better know something about the drive that's included—it's too easy to get stuck with less-than-adequate equipment.

The problem is that CD-ROM drives come shrouded in a cloud of technobabble: Average seek time, sustained throughput, SCSI-2, XA specs, multisection capability, and High Sierra compatibility are just some of the terms you'll see. Relying on different measures, at least three major manufacturers claim their drives are the fastest on the market, while others emphasize the particular performance specification that makes their products look the best.

There are no absolutes, and there's no way to pick out the fastest, most reliable, or overall best value. But doing a little homework

to understand the terms will help you identify the drives that'll best fit into your system.

### Lesson 1: Speed

**Double speed.** This is the most important measure and the easiest to understand. The original CD-ROM drives spun their platters at the same speed used by audio CD players. By 1992, it was obvious that



simply wasn't fast enough, so drive makers upped the rotational speed, resulting in double-speed drives. Double-speed drives can still play audio CDs at the regular speed, but they can literally double the speed at which they grab data and feed it out to the computer.

Increased speed is always pleasant, but it's essential when using Video

for Windows, Microsoft's live-action video and sound program used in dozens of the most popular new multimedia CD-ROMs. If you want to enjoy the video footage in the encyclopedias, most of the atlas and travel discs, and hundreds of new discs that will appear in 1994, you need a double-speed drive. Many of the old single-speed drives will stutter when playing a long

second (KBps). Although most manufacturers will quote a burst mode rate (the fastest rate at which a single read's worth of data can be put out), the one that matters is the sustained transfer rate. The sustained transfer rate indicates the speed of a continuous flow of data resulting from many disc reads.

The sustained transfer rate is a function of the disc rotation speed. Single-speed drives run at 150 KBps; double-speed drives achieve at least a 300-KBps rate. Toshiba's latest drive runs at 330 KBps, and Plextor has hit 335 KBps. In certain applications, such as ones that use Video for Windows, the increase of 30 KBps to 35 KBps can be surprisingly significant.

### Average access time.

Also called average seek time, this measures the time in milliseconds (ms) it takes the drive to receive a data request, move the head to the data location on the disc, and retrieve the data. It's possible to monkey with this one, because there's no real standard on how far the head has to move.

Access time is only the second-most-important measurement. Real-world use of CD-ROMs often involves sequential reads right down the data tracks, requiring little or no head movement, making the access time extremely fast. Remembering that hard

burst of video.

Unless your CD-ROMs are primarily text oriented and you're a patient sort who doesn't mind several-second delays in information flow, get a double-speed drive.

### Data transfer rate.

Transfer rates measure the amount of data fed from the drive to the computer bus, measured in kilobytes per

# HOW TO CHOOSE

disks offer access times under 20 ms, the fastest CD-ROM drive's 200-ms access time seems rather poky. But compared to the 1000-ms to 400-ms times of drives from two or three years ago, it's quite respectable. If a CD-ROM drive has an access time of 200 ms to 250 ms, it's considered fast.

**CPU utilization percentage.** It's important that interacting with the CD-ROM drive not monopolize your computer's CPU, which needs to be doing other tasks between the times it talks to the drive. This measure isn't always published by the vendors, but it's still significant. In fact, the Level 2 MPC specifications (explained later) require no more than 50-percent utilization.

If the drive takes too much system time, everything else slows down. Higher transfer rates require more CPU time, so newer, faster drives have to struggle to keep the utilization within bounds. The standard was raised from 40 percent to 50 percent in Level 2 MPC to accommodate the new generation of superquick drives.

**Buffer size.** A buffer reads data ahead, stores the data on a chip, and feeds it out to the CPU when requested. Without the buffer, all reads would have to come directly from the disc, which is much slower. Buffers range from

64K to 256K. For single-user systems, smaller buffers are perfectly adequate; the larger buffers have noticeable effects only in multiuser networked sessions.

### Lesson 2: Data Formats

Originally, CDs were designed to play music. The standards for data on music discs were embodied in the

Video for Windows required an update to ISO9660, codified in the "orange book." This standard—which wasn't given its own new name—encodes audio information into the normal computer data and ships it out to the computer bus, where Video for Windows separates it. Such interleaved audio data speeds up CD-ROM drive access; the old system had

XA yet, but drive makers are building it into their drives as it currently exists. XA requires that the software be written to the standard.

### Lesson 3: Photo CD

The new Kodak Photo CD system records photographs in digital form on a CD-ROM. Kodak's Photo CD standard is a takeoff on the XA standard, making it relatively easy for drive makers to add this additional compatibility.

The buzzword here is *multisession capability*. Originally, a Photo CD could only be written to one time, even if the disc ended up being only partially filled. An update to the standard allows appending images to existing photos on a CD. Current drives have the extra intelligence to find second and additional sessions.

### Lesson 4: MPC Standards

The Multimedia PC Marketing Council sets the minimum hardware configuration required to successfully run software that's MPC compatible. The original MPC standard, set in 1990, has proven inadequate to support today's more demanding CD-ROM-based software, so the council set the new MPC Level 2 (MPC-2) standard in the summer of 1993.

MPC-2 mandates a 486 processor; 4MB of RAM; a 160MB hard disk; a double-



"red book." When computer data came to CD-ROMs, the High Sierra or ISO9660 standard (in the "yellow book") controlled the format. This standard allowed for higher speeds than audio required while still allowing playback of red book audio tracks through a separate channel to the headphones or stereo jacks on the sound card.

to read the disc twice—once for the sound and once for the data.

The orange book is the current standard. The next step is the XA standard, which involves full interleaving of audio and data, with the audio then going directly to an audio chip for processing. It also provides compression of video data. The bugs aren't fully out of

# A CD-ROM DRIVE



# MULTIMEDIA PC

## How to Play Audio CDs on Your CD-ROM Drive

Your computer's CD-ROM drive is a high-priced CD player optimized for the special needs of computer data storage, but it can still play standard audio CDs.

If all you need is a basic CD player program, you can use Windows' own Media Player (MPLAYWE.EXE). It lets you start, stop, and pause your CD, as well as move from track to track. Most multimedia kits and CD-ROM drives also come with utility programs that play audio CDs.

You can augment these basic programs with full-fledged computer CD-player programs that allow you to enter artists' names and track titles. Once you've cataloged a CD, the player remembers it. You can pick from the displayed track titles to create your own indi-

visualized program.

CD Player 3.0 (Graphical Bytes, 516-283-4473, \$55) puts a familiar CD-player control panel on your Windows desktop with VCR-like control buttons. To record a CD on an audiocassette, use the fit-to-tape feature to compute how best to put the tracks onto various lengths of tape.



Sound-Works

(The Software Toolworks, 800-434-3088 or 415-883-3000, \$49.95) is a DOS application that runs memory resident in 15K and can be unloaded when not needed. It's old-fashioned and also a tad slow to work with, but it plays CDs and catalogs your collection nicely. It comes with a Works application that serves as a graphical, icon-based menu system for DOS.

speed, XA-ready, multisession-capable CD-ROM drive; a 16-bit sound card; and a 16-bit Super VGA video card capable of 65,000 colors in 640 x 480 mode. The standard doesn't specify local bus, but it would be difficult to meet the required specs without it.

The CD-ROM drive must achieve a sustained transfer rate of at least 300 KBps. MPC-2 machines should be able to play digi-

tized video in a 320 x 240 window at 15 frames per second. The fast CD-ROM drive is a key component in achieving that goal.

We're talking about a powerful computer here, one that'll set you back a fair piece of change. It's smart to buy your CD-ROM drive and sound card to match the MPC-2 specs, even if you're still running a mere 386. It'll pay off in the long run. Certainly not all current CD-ROM software

requires that kind of power, but with Video for Windows entering the equation, you're going to be needing that 486.

## Lesson 5: Catching the Right Bus

Most CD-ROM drives run off a SCSI (pronounced "scuzzy") bus, usually controlled by a SCSI controller on the sound card. Creative Labs, the manufacturer of Sound Blaster sound cards and associated multimedia upgrade kits, is the most visible holdout. Sound Blaster kits control their CD-ROM drives through an IDE bus. If you plan to control your CD-ROM drive from a Sound Blaster card, you'll have to buy a compatible drive that runs from an IDE controller.

The advantages of the SCSI bus are speed, a widely known standard, and the ability to add as many as seven devices to any SCSI board. You could run a tape drive, a Bernoulli box, a scanner, a hard disk, and another SCSI device without using a slot for a controller card for each device.

Also, look for compliance with the new SCSI-2 standard.

## Lesson 6: Physical Matters

You can select either an external or an internal drive strictly on the basis of availability of drive bays and desktop space; there's no performance difference. But remember that even an external drive requires a controller card inside the case.

There are two ways to handle getting a disc into

the CD-ROM drive. Most common is a caddy system, involving a removable carrier that holds the CD-ROM as it's inserted into the drive. Less common is a motorized assembly, where a metal tray slides out of the drive's housing to directly accept the CD-ROM.

Because CD-ROM drives are optical devices (they reflect laser beams off tiny spots on the disc's surface), keeping the drive clean is essential. Although the drawer-system drive manufacturers would probably dispute it, using a caddy probably reduces the risk of internal contamination of the laser mechanism. Many drives include a device that physically cleans the laser lens each time you slide a CD-ROM into or out of the drive.

## Midterm Exam: Choosing a Drive

You've now done your homework on general considerations for buying a CD-ROM drive. How do you put it together to select a drive? Try this:

1. Determine if you need double speed and low access time. Will you be using current educational and reference CD-ROMs, such as multimedia encyclopedias? If so, you need double speed. If your use will be exclusively for searching text bases and other nonmultimedia tasks, a slower drive will suffice.

2. Determine if you need the new specs, including XA and Photo CD multisession capability. Basically, if you need double speed, you might as well get the rest of it. (It's hard to find a fast drive that doesn't meet

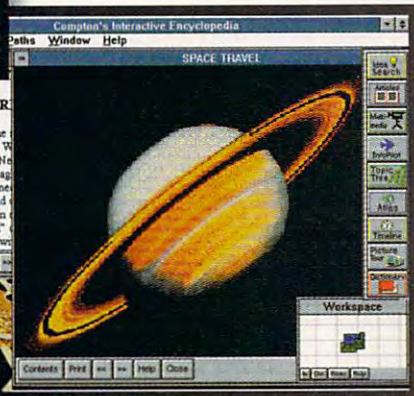
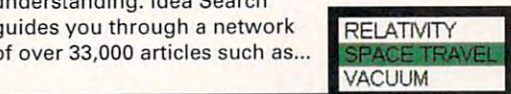
# Explore.

## As Far and as Fast as Your Mind Will Travel.

Nine unique entry paths are available – one to suit every style of learning. With Virtual Workspace™ open multiple articles, pictures, videos, sounds and animations to expand your understanding. Idea Search guides you through a network of over 33,000 articles such as...

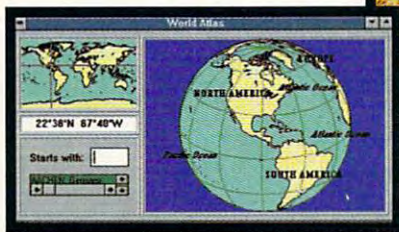
On CD ROM for Windows™, DOS and Macintosh®.

ALL NEW  
1994  
EDITION



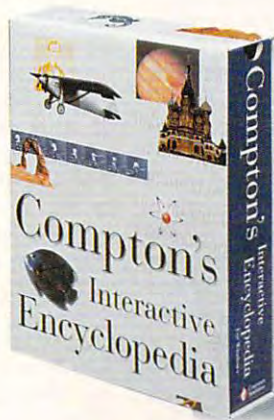
Access U.S. and world history through the new multi-level, dynamic timeline. Click the time period of your choice and open related articles and multimedia displays.

To bring learning alive, there's nothing like full-motion video and sound. People remember almost three times more with multi-sensory stimulation over reading alone! *Compton's* features over 200 multimedia clips including videos, animations, sounds, and exclusive slide shows – plus over 7,000 images.



Start with an astronaut's view of the globe. Click on any region and zoom in for a closer look. Move from continents to countries, to cities – with each level bringing you greater detail.

It's a big universe. And with *Compton's Interactive Encyclopedia™*, you can explore it daily. With the click of a mouse you can experience a space shuttle launch – in full-motion video and sound. Click again, and you'll discover the history, technology and people who made it possible. The same easy access can take you from science to nature, history, people and places. *Compton's Interactive Encyclopedia™*, chosen easiest-to-use, offers a



world of knowledge through videos, animations, narrated slide presentations, audio and quickly referenced text. Still, the most compelling reason for choosing *Compton's* is this: Your children. You're giving them a tool that can increase their comprehension, stimulate curiosity and enhance motivation. Yes, and *Compton's* is fun, too. And that's what learning should be! Visit your local retailer or call 800-862-2206 for more information.

Circle Reader Service Number 240



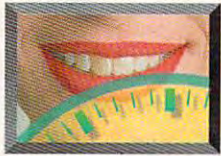
COMPTON'S  
NewMedia

2320 Camino Vida Roble  
Carlsbad, CA 92009 (800) 826-2206



www.commodore.ca





## MULTIMEDIA PC

these specs.)

3. Determine which bus to use. This one's easy: Use the SCSI-2 bus unless you have or plan to buy a Sound Blaster sound card.

4. Determine the physical setup you need. To keep the drive's innards clean, choose an internal drive if possible—preferably one that uses a caddy.

Now that you know the specs you need, the choice boils down to fine distinctions between drives—such as exact speed figures—and price. You also need to determine if you want to buy the drive as part of a multimedia upgrade kit. If you don't have a sound card yet, give serious consideration to the upgrade kits, which give you a CD-ROM drive, a sound card, and usually an attractive bundle of CD-ROM titles. (If you're opting for a kit, it's not unreasonable to make your choice based on the CD-ROM titles that come with the kit.)

### The Drives

In spite of the prediction that we'll be buying 18 million CD-ROM drives in 1994, there aren't many vendors manufacturing drives. As you read the ads, look at the multimedia kits and multimedia-ready computers. You'll see the same basic dozen or so drive manufacturers. Here's a summary of the product lines of several of the major CD-ROM drive manufacturers.

**Toshiba XM-3401 series.** Available as internal drives (XM-3401B, \$695), external drives (TXM-3401E, \$895), or portable drives operating with sup-

plied parallel port adapters (TXM-3401P, \$925), these fine double-speed drives show up in many kits and multimedia systems. Toshiba (714-583-3000) touts them as the fastest on the market, based on their unmatched 200ms average access time. They also achieve a 330-KBps sustained transfer rate, which is the second fastest on



the market. All three use the SCSI-2 interface and are XA ready and Photo CD multisession capable.

**NEC MultiSpin family.** NEC (800-NEC-INFO or 708-860-9500) introduced the very first double-speed drive, calling the technology MultiSpin. Both the internal drive (MultiSpin 84, \$630) and the external drive (MultiSpin 74, \$695) require a disc caddy and utilize a double-door system on the drive to ensure dust protection. Both deliver a 300-KBps sustained transfer rate with a 280-ms average access time. They're XA ready and Photo CD multisession capable, and they

offer a switchable setting to either a SCSI-1 or a SCSI-2 bus. The MultiSpin 38 (\$560) is a parallel-port portable drive, which loads the disc through a top door. The first double-speed portable drive, the MultiSpin 38 maintains a 300-KBps sustained transfer rate but has a slower 400-ms average access time. It can operate with an optional battery pack. NEC offers an upgrade plan for owners of its earlier models who trade in working models of the C D R - 3 7 portable (\$179), CDR-74 external (\$249), and CDR-84 internal (\$229).

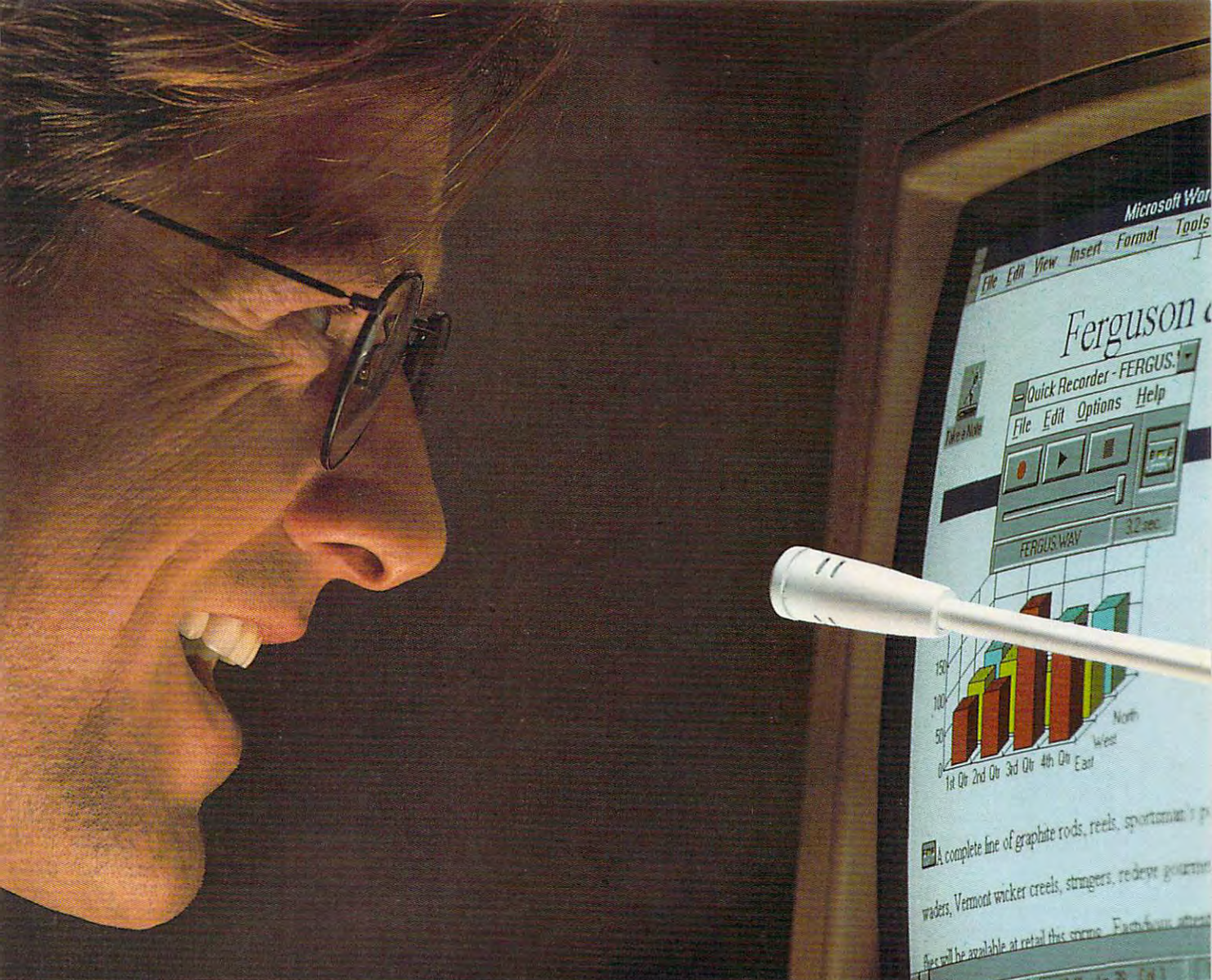
**Plexstor Double-Speed Plus drives.** Plexstor (408-980-1838), formerly called Texel, also claims its drives are the fastest on the market, based on its 335-KBps sustained transfer rate with a 240-ms average access time. Both the internal DM-3028 (\$499) and the external DM-5028 (\$599) use a caddy system and have drive doors for dust protection. (The doors make using the drives a little difficult until you learn how to gently pull the door down with the lip of the caddy, once again making disc loading a one-handed task.) The drives are SCSI-2 compliant, XA ready, and Photo CD multisession capable. Plexstor drives are also available in a variety of bundles that include software, Media Vision's Pro AudioSpectrum sound cards, and speakers.

**Philips LMS drives.** Philips LMS (719-593-7900), formerly Laser Magnetic Storage International, is the only major CD-ROM drive manufacturer based in the United States. Its CM206 internal drive (\$499) is a double-speed drive that delivers a 300-KBps sustained transfer rate and a 350-ms average access time. The CM206 uses the 16-bit PC/AT bus directly rather than a SCSI adapter, which LMS says is faster. The drive uses a motorized tray that comes out of the drive to accept a disc, rather than a caddy. An unusual feature allows playing audio CDs with a simple button push—without any special software.

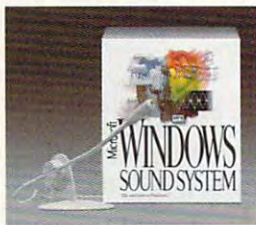
**MicroSolutions Backpack 160550.** MicroSolutions (815-756-3411) makes a series of Backpack portable peripherals, including a portable CD-ROM drive (\$499). The drive plugs directly into the parallel port of any computer. It's a single-speed drive, delivering a 150-KBps sustained transfer rate and a 350-ms average access time. It's XA and Photo CD multisession compatible and uses a top-loading, no-caddy system. Because of its slower speed, it's not appropriate for the more demanding multimedia applications, such as those using Video for Windows. If your road work, however, requires access to textual information and simple graphics, this could be a good choice.

Editor's note: Just as we were going to press, NEC announced its new MultiSpin 3X and MultiSpin 4X readers. The 3X readers are triple-speed CD-ROM dri-





## FIRST WE MADE WINDOWS. NOW IT'S TIME TO TALK.



With the new Microsoft® Windows™ Sound System, just tell your computer what you want it to do. You can customize your system to respond to your personal spoken commands. Even our new directional microphone knows exactly who you are.

This full set of audio software has lots of options, too. Spice up presentations with music or quotes.

Or proofread numbers as the computer reads them back.

All for the price of a game.

You can also get this software with the sound board included. So go visit your nearest reseller to see what's creating all the conversation.

**Microsoft**  
Making it easier



© 1993 Microsoft Corporation. All rights reserved. Microsoft is a registered trademark and Windows and the Windows logo are trademarks of Microsoft Corporation.

[www.commodore.ca](http://www.commodore.ca)



## MULTIMEDIA PC

### How to Cache Your CD-ROM Drive

To see the value of a disk cache, try starting up Windows with your cache disabled. On my fast 486 DX2/66, it takes just over two minutes to load Windows without a cache. With SMARTDRV, the relatively poky Microsoft cache utility supplied with Windows and DOS, the same task takes only 37 seconds.

The slowest drive on your system is the CD-ROM drive; caching it should accelerate it to warp speed. Unfortunately, SMARTDRV doesn't cache CD-ROM drives; you need a third-party program for

that. I looked briefly at three of them.

Super PC-Kwik (included in WinMaster 1.5 from PC-Kwik, 800-274-5945 or 503-644-5644, \$129.95) is the slowest because it's the most conservative with your data. It doesn't default to delayed disk writes and request sorting, as the others do. It's also difficult to install, requiring you to somehow get its driver loaded physically within 64K of the CD-ROM driver. On one system, I couldn't get it to work at all; on another, it took a half-dozen tries before I got it

loaded properly.

Lightning CD (Lucid, 800-925-8243 or 214-994-8100, \$79.95) is faster but also suffers from a difficult installation. The manual says in one place that the program will disable SMARTDRV, but it doesn't. Its driver must install after the CD-ROM device driver, but the installation program doesn't necessarily put it there. It took three tries to get this one running, but when it runs, it earns its name. Lightning CD comes with keyboard and video speed enhancers and a directory

tree deletion tool.

Norton Speedrive 4.0 (Symantec, 800-441-7234 or 408-252-3570, \$99) is similarly fast. Its installation was the simplest, but it also required a manual tweak to the AUTO-EXEC.BAT file that wasn't obvious until my hard drive started locking up occasionally. It adds a couple of handy Windows applets to monitor and test cache performance. Because of its safer installation routine, I would recommend Norton Speedrive for those who dislike having to fuss with the system files.

ves (internal, \$500; external, \$600; portable, \$455), while the 4X reader is a quadruple-speed CD-ROM drive (external, \$995).

#### Multimedia Upgrade Kits

At press time, only Media Vision and Creative Labs were offering Level 2 MPC upgrade kits.

**Media Vision kits.** Media Vision (800-348-7116 or 510-770-8600) is the manufacturer of the market-leading Pro AudioSpectrum 16 sound card and related products.

The Pro 16 Multimedia System II (\$1,199) is the high-end kit, featuring a double-speed NEC 84JD-1 drive with a 300-KBps sustained transfer rate and a quick 250-ms average access time. It includes the Pro AudioSpectrum 16 sound card and the following titles: Compton's Interactive Encyclopedia for

Windows, Battle Chess Enhanced, Mantis, Civilization, Macromedia Action!, Mayo Clinic Family Health Book, PC Karaoke, and Where in the World Is Carmen Sandiego? Deluxe.

The Fusion Double CD-16 (external, \$799; internal, \$699) features the double-speed NEC 55J drive with a 300-KBps sustained transfer rate and a 350-ms average seek time. It's fully MPC-2 compatible. The kit includes a Pro AudioSpectrum 16 sound card and four CD-ROM titles: Compton's Interactive Encyclopedia for Windows, Battle Chess, Arthur's Teacher Trouble, and The 7th Guest.

**Creative Labs kits.** Of course, Creative Labs makes the famous Sound Blaster series of sound boards. It also sells a series of multimedia upgrade kits featuring Sound Blaster sound card products. Note

that the CD-ROM drives in these kits are not SCSI-bus compatible.

The Sound Blaster DigitalEdge CD kit (\$999) features a double-speed, MPC-2-compatible drive with a 300-KBps sustained transfer rate and a 350-ms average access time. The drive uses a front-loading tray. The sound card is the new Sound Blaster Pro 16 with Advanced Signal Processing, a real powerhouse. The bundled software titles include VoiceAssist (voice recognition software), Aldus PhotoStyler SE Photo CD software, The Software Toolworks Multimedia Encyclopedia, Microsoft Works for Windows, Microsoft Bookshelf, Macromedia Action!, and AuthorWare Star.

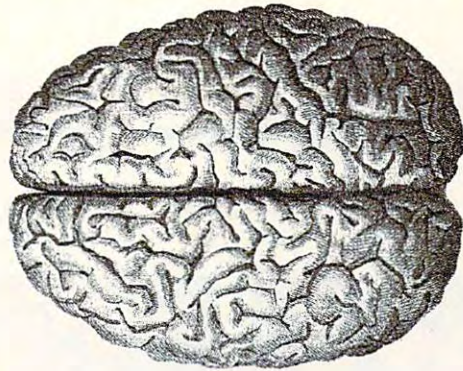
The Sound Blaster Education CD 16 kit (\$750) is built around a double-speed, MPC-2-compatible drive with a 300-KBps sustained transfer rate and a

320-ms average access time. The sound card is the Sound Blaster 16. Creative Labs went all out in bundling software for this kit. The package includes Aldus PhotoStyler SE, The Software Toolworks Multimedia Encyclopedia, Sherlock Holmes Consulting Detective, Lemmings, Secret Weapons of the Luftwaffe, Loom, The Secret of Monkey Island, and Indianapolis 500, the Simulation.

#### The Final Exam: Parting Words

Buying a CD-ROM drive to bring your computer into the era of faster multimedia applications isn't as difficult as it seems. A little education cuts through the smoke screen of letters, numbers, speeds, and compatibilities. With a little research, you'll be ready to choose one of those 18 million CD-ROM drives waiting to be bought in 1994. □

# THIS IS YOUR BRAIN.




# THIS IS YOUR BRAIN NEUROJACKED INTO CYBERNET IN SPECTRE VR.™

FULL MOTION VIDEO FROM CD-ROM: THINK OF IT AS AN INTERMEDIATE STEP BETWEEN CYBERSPACE AND LIFE AS YOU'VE KNOWN IT.



SMART WALLS ARE COVERED WITH LIVE ACTION VIDEO. ACID POOLS WILL TRY TO TRAP YOU. MAYBE YOUR SCATTER SHOTS CAN HELP UNTRAP YOU.

## ANY QUESTIONS?


GO AHEAD, JACK INTO A WHOLE OTHER WORLD.  THAT IS, IF YOU THINK YOU'RE READY TO HANDLE NANOSECOND PRESSURE FROM

SMART-WEAPON ENEMIES THAT LEARN YOUR EVERY MOVE THEN STRIKE FROM ANY DIRECTION.  THE CYBERWORLD HAS NEVER BEEN SO FRIGHTENINGLY REAL. BUT THERE'S

HOPE: AT LEAST YOU'LL HAVE AN ARSENAL THAT'S JUST AS SMART AND POWERFUL AS THAT OF YOUR OPPONENTS.  THE QUESTION: CAN YOU NAVIGATE THE MATRIX

AS QUICKLY AS YOUR BRAIN PROCESSES THE STIMULATION ON YOUR SCREEN?  THE ANSWER: FIND OUT AS YOU HOVER ABOVE THE CYBERARENA, OR SUBMERGE

INTO NEGATIVE CYBERSPACE.  YOU CAN EVEN ALTER THE LANDSCAPE, YOUR OPPONENTS AND YOUR WEAPONS WITH VRCHITECT™ 

 SO, JACK INTO SPECTRE VR WITH ONE PLAYER, A NETWORK OF UP TO EIGHT, OR EVEN MODEM PLAY ON THE PC. AND GET READY FOR A WHITE

HOT ELECTRONIC ADRENALINE RUSH. BUT BE FOREWARNED; REALITY WILL NEVER BE QUITE THE SAME AGAIN.   VELOCITY™



AVAILABLE FOR YOUR IBM PC, MAC AND CD-ROM.

Circle Reader Service Number 180

## HEY, YOU WITH THE CPU: GET A CYBERLIFE. GET SPECTRE VR.™

© 1993 VELOCITY™. ALL RIGHTS RESERVED. VELOCITY, SPECTRE VR AND VRCHITECT ARE TRADEMARKS OF VELOCITY DEVELOPMENT CORPORATION. PENINSULA Gameworks IS A TRADEMARK OF PENINSULA Gameworks.

[www.commodore.ca](http://www.commodore.ca)



## NEW MULTIMEDIA PRODUCTS

Edited By Polly Cillpam

### Reading Can Be Fun

Digital Theater has announced a series of edutainment CD-ROMs, called The Learning Carnival. The first entry in the series, The Reading Carnival, is designed to get children ages 6-10 actively involved in reading—and keep them entertained while they learn. Children can enjoy a variety of activities while they explore sections on Animals Facts, Superhero Stories, and Fascinating Facts.

The Reading Carnival features 150 separate screens, six stories, a 630-word pronunciation glossary, eight spelling games and reading quizzes, 18 creative problem-solving games, 60 screens of natural animal photography, and a 20-screen interactive coloring book.

Digital Theater  
(404) 446-1332  
\$49.95

Circle Reader Service Number 530

### Culture at Your PC

Here's your chance to sit back and be entertained—and learn about fine art at the same time. Having Cameron's Fine Art Poster Catalog on CD-ROM is like owning a museum full of masterpieces. There are 550 bitmap works of art, 100 WAV-format stereo music files, and over 30 AVI-format video files of sculptures.

The art is categorized into several different segments. Pictures at an Exhibition is a tour of 100 replicas of the world's most famous artists, including Old Masters, Impressionists, Post Impressionists, and Contemporary painters.

94 COMPUTE JANUARY 1994



Get cultured with Cameron's Fine Art Poster Catalog on CD-ROM.

Each one comes with a short history of the painting and painter (including the museum currently displaying the work of art). While viewing the art, you're entertained by a classical music clip, which includes a notation of the musical title and composer.

Sculptures on Video displays historical facts on pieces ranging from the T'ang Dynasty to Rodin; it plays a video clip of the sculpture rotating with accompanying music.

Cameron Enterprises  
(800) 765-1-ART  
\$49

Circle Reader Service Number 531

### Little Critters on CD-ROM

Explore the world of baby animals with Kid's Zoo, an adventure for prereaders and early readers on either disk or CD-ROM. Children as young as 3 can learn about the animal kingdom and its young. The program includes an interactive encyclopedia that lets children explore mammals, birds, fish, reptiles, amphibians, and invertebrates through a variety of avenues—animal type, size, lifespan, speed, and even footprints. They can also learn through a series of games that assess their understanding of animal names, appearances, habi-



tats, and sounds. Some of the activities involve matching an animal to the sound it makes or matching an animal to its geographical habitat.

Using the program's paw pointer, children can learn about baby animals through eight activities, including a talking storybook, Baby Animal Movie Theater, and five multilevel games that encourage children to learn and explore as they're challenged by the various levels of the different activities. Upon completion of each game, children are rewarded with congratulations, applause, and a computer-rendered movie created with the program's interactive movie technology.

Knowledge Adventure  
(818) 542-4200  
\$79.95 (CD-ROM version)  
\$59.95 (disk version)

Circle Reader Service Number 532

### More for Your Money

The Sound Galaxy PRO 16 Multimedia Upgrade Kit is quite a bargain. The kit costs hundreds of dollars less than the separate components, and you get five popular CD-ROM titles. The package includes Aztech Labs' new NX PRO 16 sound card, a Mitsumi AT-bus CD-ROM drive, headphones, and a microphone.

Aztech Labs claims the

NX PRO 16 is the most compatible sound card on the market; it supports the Sound Blaster Pro, Microsoft Windows Sound System, Ad Lib, Disney Sound Source, and COVOX Speech Thing.

The bundled CD-ROM titles include Microsoft Works, Macromedia Action! 2.0, Battle Chess CD-ROM Enhanced, Toolworks Encyclopedia, and Toolworks Atlas.

Aztech Labs  
(510) 623-8988  
\$639

Circle Reader Service Number 533

### High-Tech Show and Tell

Ask Me Multimedia Center has recently introduced a new multimedia software package, called SUPER Show & Tell. It's Windows based, it allows the user to



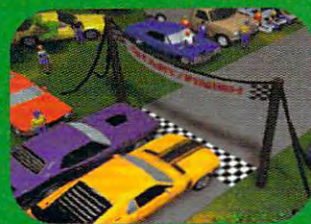
Create multimedia presentations

create interactive multimedia presentations in a free-form environment, it's user-friendly, and it supports all popular graphics, animation, sound, and digital video formats.

The program's key attraction is its universal appeal. For example, it's



Around here nice guys don't finish last - they don't even finish. Better know how to drive or Catfish Louie and company will take turns making your Backroad Racer a pile of twisted, burning wreckage. Then taunt you as you watch instant replays of your wipeouts. Video clips give hints and make threats while you try to outrun cops and race on four different tracks. Use 3-D animated instructions to build a model of your car so it's easier to identify the torched remains. Available for IBM on CD-ROM.



**The model makes the game better. The game makes the model better.™**

Video clips just like this one make the game extra bad. But in a good way.

After you  
build your  
car you can  
follow all  
traffic laws  
and be a safe  
& courteous  
driver.



*{Of course, you could also go play an action-packed game of hopscotch with your sister.}*



**BACKROAD RACERS**  
www.commodore.ca



## NEW MULTIMEDIA PRODUCTS

appropriate for business and home office users (including sales and marketing), home PC hobbyists, and teachers.

Businesspeople can use the program's colorful charts, still-frame pictures, and text with sound and motion to make their presentations more effective. Hobbyists can use it to create interactive résumés or home photo albums. Teachers can use it to make their own interactive educational tools.

Ask Me Multimedia Center  
(612) 531-0603  
\$149

Circle Reader Service Number 534

### Take the Plunge

Wish you could explore the world's oceans? Oceans Below, from The Software Toolworks, has just the journey for you, and you won't even get wet. Choose your favorite ocean, prepare for the trip, and learn all about the undersea world from the floor up.

Select from over 200 topics of information, as well as over 45 minutes of video clips, synchronized sound, photographs, and original music. Learn about local sea life, explore shipwrecks, and feed or ride any of the fish in the habitat you've selected. It's like going to the aquarium without leaving the comfort of your own home.

The Software Toolworks  
(415) 883-3000  
\$49.95

Circle Reader Service Number 535

96 COMPUTE JANUARY 1994

### Using Technology to Humanize History

Few museums are as emotionally moving as the Museum of Tolerance in Los Angeles, and multimedia plays a large part in communicating that emotion. This is an interactive museum focused on World War II and general issues of intolerance. Its goal is to provide in-depth information for a wide audience.

The main floor is filled with exhibits, while the second floor allows visitors to interact with 30 different computer workstations. The workstations free visitors to research what they're interested in via user-friendly touchscreens.

Visitors can view video footage with first-person accounts and testimonies of Holocaust survivors and liberators.



The Museum of Tolerance features 30 multimedia workstations.

Eight main topics include 5000 different subjects. The database contains 39 volumes of Time/Life Books, MacMillan's *Encyclopedia of the Holocaust*, and *Encyclopedia Judaica*, as well as hundreds of specialty articles not available anywhere else in the world. There are also 57,000 archival photographs, documents, and maps. You can work your way down through a learning tree to the topic of your choice, or you can pick a particular element of that topic and swim laterally through the database for a more focused look at a subject of particular interest.

Museum of Tolerance  
(310) 553-9036  
Admission prices vary



according to age and group size. School groups are admitted free.

Circle Reader Service Number 536

### Multimedia Bonanza

Trying to build your own MPC system? Aris Entertainment may have the solution for you, and it costs only \$14.95. The company has begun shipping MPC Wizard 2.0, which gives CD-ROM and Windows 3.1 users the most up-to-date VGA and sound drivers for their multimedia systems.

Like its predecessor, MPC Wizard 1.0, MPC Wizard 2.0 contains the largest collection of VGA and sound drivers for Windows 3.1 on a single CD-ROM. This latest version adds nine Microsoft Video for Windows runtime videos, 20MB of additional drivers, 60 color photographic images, and 60 audio tracks. You also get Aris's standard Media-Clips interface to view the pictures, hear the sound tracks, and watch the Video for Windows live-action videos. All the videos, sound clips, and images may be used royalty-free in any presentation, as long as credit is given to Aris.

Aris Entertainment  
(310) 821-0234  
\$14.95

Circle Reader Service Number 537



Explore undersea life with Ocean's Below.

The elusive Detective of the Macabre,  
**EDWARD CARNBY RETURNS!**

## ALONE IN THE DARK 2™

Over 200,000 mystery enthusiasts have been captivated by the inscrutable Alone in the Dark 1 virtual adventure. Brace yourself for **ALONE IN THE DARK 2!**

Featuring:

- 50 hours of gameplay
- 70 enigmatic characters
  - 15 perplexing and challenging levels
- Hundreds of detailed 3-D objects
- Frightfully eerie soundtrack

Delve into a chilling mystery as Edward Carnby, embarking on his second nerve-twisting adventure! The realm of the macabre has never gripped tighter as you put your sleuthing skills to the test and piece together the mysteries of **ALONE IN THE DARK 2!**

### Free *Mystery Examiner* Offer

Find yourself lost in another time with Volume Two of the 1924 *Mystery Examiner*, a replica period newspaper detailing the events that shape the **ALONE IN THE DARK** series. Send a self addressed, stamped, business-size envelope to:  
**I•MOTION**

*Mystery Examiner* Newsletter Offer  
1341 Ocean Avenue, Box 417  
Santa Monica, CA 90401



**Lose Yourself In Virtual Mystery as You Return to the World of Alone in the Dark!**





# PAGAN

## Ultima VIII

### AVATAR™, YOU'RE NOT IN BRITANNIA ANYMORE!

*Foiled by your defense of Britannia, the evil Guardian transports you to a world already under his dominion. Now you must confront alien realms and powerful new enemies in a battle without allies. But wait! Perhaps more has changed than just the battlefield . . . ?*

- Incredibly smooth and lifelike animation — 400 frames of art per character (1200 frames for the Avatar) and 10 times the art of any previous Ultima!
- A new, more natural perspective.
- Compatibility with EMS, XMS and all other common memory management systems.
- Twice as many frames per second, producing a richer, faster story in this luxuriously detailed world!



Actual screens may vary.

**ORIGIN**  
We create worlds.®

An Electronic Arts® Company

P.O. BOX 161750 AUSTIN, TX 78716

Look for the new *Pagan Clue Book!*

Pagan and Avatar are trademarks of ORIGIN Systems, Inc. Ultima, Origin, and We create worlds are registered trademarks of ORIGIN Systems, Inc. Copyright © 1993 ORIGIN Systems, Inc. Electronic Arts is a registered trademark of Electronic Arts. For IBM PC and 100% compatible systems.

Available at a software retailer near you, or call 1-800-245-4525 for MC/Visa/Discover orders.

Circle Reader Service Number 160

 [www.electronicarts.com](http://www.electronicarts.com)

# PRODUCTIVITY CHOICE

*This flexible spreadsheet package offers a new, more efficient way of organizing information.*

Stephen Levy

## IMPROV FOR WINDOWS 2.1

You may never have thought it possible, but there's a whole new way of working with spreadsheets. With Improv for Windows, the new superstar from Lotus, gone are the traditional spreadsheet rows, columns, and cells. In their place you'll find items and groups—and a more efficient way of using and looking at data.

Improv offers a tremendous advantage to those who need more than an electronic version of a paper worksheet. Because of the way it organizes data, Improv is perfect for those who need to organize the same information in a variety of ways. It's also appropriate for people who need to make presentations. By using Improv to create different views of the same data and to place charts created from the data as views, users can actually create a sort of slide show with their data.

With Improv, you have to begin thinking in terms of items and groups. An item consists of a name and all the cells associated with that name. Improv uses the term *item* to describe both rows and columns for the location of data. If you're accustomed to the traditional spreadsheet structure, this can be a bit confusing until you realize that an item and all of its related cells are not fixed in any row or column.

You also have to be concerned with the concept of dynamic placement of data. In traditional spreadsheets, the data can be dynamic, but the structure of the worksheet is static. With Improv, the data



and the placement are both dynamic; that is, you can easily present the information in different ways without rebuilding the entire worksheet. And you can save each of your views within the same worksheet.

This dynamic views function is a powerful tool and is surprisingly simple to use. Imagine a worksheet that lists income, expenses, and profits for a company by regions. These figures are listed by month for each region, so this worksheet would show you the profit per region per month. With Improv, you can easily and quickly create a second view that groups the regions together by month, allowing you a quick comparison of the regions' income, expenses, and profit. The data for each of the items stays together in each view. No matter how you move the categories around, each item's data always remains together. And charting this same information is as simple as selecting the Create Chart option from the

menu. Being able to manipulate the data in a worksheet is very handy should you need to present information one way for the sales and marketing department and another way for the accountants.

Improv's paging feature offers another unique way of organizing data. It allows you to highlight specific data and still have other information at your disposal. In our example above, we could easily move the Income/Expense/Profit category into the paging position. This would mean that only one of the three items (income, expenses, or profits) for each of the regions would be displayed at a time. To see any of the other items, you'd just click on the page arrow. Thus, the paging feature allows you to isolate the data you want to emphasize and still be able to page through other information if necessary. You could likewise isolate the months, paging through the data one month at a time. Improv's paging feature is not just interesting; it's also an in-

valuable timesaver if you need to make a presentation that requires specific data to be highlighted for one group and other data to be highlighted for another. All the while, you'll still have other data handy if you need it when you explain ideas or when your listeners request further details.

Items can also be given style attributes. And when you change the layout of the worksheet by moving a category, the styles stay with the items, regardless of how the worksheet is organized. A full complement of formatting options is available, so you can change the text color, size, style, shading, and so forth.

To make your work even easier, Lotus has included a feature called Quick Menus. These menus give you easy access to common editing commands and other pertinent commands. You invoke Quick Menus by pressing the right mouse button; a standard pull-down menu appears at the mouse pointer—right where you're currently working. This helpful and convenient feature further illustrates the effort Lotus made to make Improv both innovative and easy to use.

And the package doesn't stop there. It offers another unique feature—dynamic general formulas. Unlike formulas in other spreadsheets, formulas in Improv are easy to understand. They are expressed in words, not in cell address notation. A formula such as Profit=Income-Expenses is much easier to understand (and remember) than +E4-F4. Formulas can apply to a range automatically, so copying them over and over again isn't necessary.

Improv is also self-docu-

menting: The formulas are placed in another pane on the screen in words. When you highlight any cell or item that is the result of a formula, that formula is also highlighted. This allows you to see how the result was derived.

Creating formulas is quick and intuitive. There are a number of ways to begin creating a formula, as Lotus has tried to accommodate the different ways users work with spreadsheets. You can use the menus and choose Create Formula, or if you're a traditionalist, you can press the = or + key to start writing a formula. Improv will supply the beginning of the formula, such as Profit=. Then all you need to do is click on the appropriate items and the Formula Bar.

Improv also includes all the charting tools that spreadsheet users have come to expect. You have 20 different types of charts to pick from: 9 bar charts, 3 line charts, 2 pie charts, 3 area charts, and 3 mixed charts. Among the assortment are both two- and three-dimensional options. Additionally, all of Improv's charts are dynamic, changing as the data in the worksheet changes. It's easy to create a chart, too: You need only select the data you want charted and choose Create Chart, and it's done.

Improv doesn't neglect the powerful, advanced features experienced spreadsheet users will want. For instance, it includes LotusScripts, a tool for building applications based on Improv or extending Improv's functionality.

Of course, an important consideration when you look at any new spreadsheet is how well it imports data from other spreadsheets. Improv imports

data easily from other Lotus spreadsheets and from Excel. To import from Quattro Pro for Windows, however, you'll have to save the Quattro Pro file in a format that Improv can understand, such as 1-2-3. You can also import ASCII text files, although the imported text might need some work. Imported spreadsheets help the user of traditional spreadsheets feel right at home by using row and column numbers and letters as item names.

Lotus Improv for Windows 2.1 provides the software mar-

**IBM PC or compatible (20-MHz 80386SX or faster), 4MB RAM (6MB recommended), VGA, Windows 3.1, hard drive with 12MB free, mouse recommended—\$495**

The screenshot shows the Lotus Improv interface with two worksheets, 'Worksheet - View1 - EXAMPLE' and 'Worksheet - View2 - EXAMPLE'. Both worksheets display a financial summary table with columns for 'January', 'February', and 'March'. The data is organized into sections for 'Income', 'Expenses', and 'Profit', with sub-sections for 'Northeast', 'Southeast', and 'Southwest'. A 'Totals' row is at the bottom of each section. Below the worksheets, there are formula panes showing the dynamic formulas used to calculate the values, such as 'Profit = Income - Expenses' and 'Totals: January Income = Northeast January Income + Southeast January Income + Northwest January Income + Southwest January Income'.

		January	February	March
Income	Northeast	5000	7000	6000
	Southeast	5400	8700	8000
	Northwest	5200	6700	6000
	Southwest	8000	3700	5200
	Totals	23600	26100	26200
Expenses	Northeast	750	900	1200
	Southeast	750	800	1200
	Northwest	800	4500	3200
	Southwest	2100	260	700
	Totals	4400	6460	6300
Profit	Northeast	4250	6100	4800
	Southeast	4650	7900	7800
	Northwest	4400	2200	2800
	Southwest	5900	3440	4500
	Totals	19200	19640	19900

ket with a unique set of capabilities for building, viewing, and analyzing data. It offers exceptional flexibility for displaying data. Spreadsheet users might find in Improv a new tool that will make their tasks quicker and easier. Those who often have to make data presentations will find Improv meets their needs. Lotus is to be commended for moving spreadsheets a big step forward. Improv's new, easy, and intuitive approach to data is long overdue. □

**LOTUS  
55 Cambridge  
Pkwy.  
Cambridge, MA  
02142  
(800) 343-5414**

Circle Reader Service Number 391

# PERSONAL PRODUCTIVITY

Bradley M. Small

## THE SUPPORT FOR OS/2 2.1

Last month, we took a close look at the power of OS/2. This month, we'll look at something equally important: third-party support for OS/2.

As we showed last month, OS/2 is highly compatible with Windows 3.1. The million-dollar question is how long OS/2 will be able to maintain Windows compatibility. IBM and Microsoft had a contract that involved each company's having access to the other's source code. This contract expired in September 1993. IBM will continue to be able to use the technology of 16-bit Windows (Windows 3.0 and 3.1) forever but will not have access to 32-bit Windows code (Windows NT) or any future version of Windows unless IBM and Microsoft renegotiate.

On the software side, OS/2 provides potential for growth. To start with, over 1700 OS/2 applications exist, both commercial and shareware. IBM will provide a list on request.

Will software continue to be written for OS/2? Peter Cohen, spreadsheet PR manager of Lotus Development, told me that Lotus is committed to developing for OS/2. "We've demonstrated this commitment with the [OS/2] products that we've delivered over the last few months." Lotus has released 32-bit OS/2 versions of cc:Mail, Lotus 1-2-3 2.0, Freelance Graphics, and Lotus Notes. And by the time this column goes to press, Lotus will have released Ami Pro for OS/2, making it the first company to have a full suite of OS/2 desktop applications.

WordPerfect has released and is shipping WordPerfect 5.2 for OS/2. It supports all of the features of the current DOS and Windows versions, and it comes with a 32-bit ver-

sion of Grammatik for OS/2.

In the OS/2 version, WordPerfect adds the document summary to the file's detail view. There are other important features like drag-and-drop printing and document registration that give it advantages over other versions of the product.

WordPerfect for OS/2 is a Mirrors port of the Windows version. Mirrors is a library used for porting existing Windows apps to 16-bit OS/2. Since the port is 16-bit rather than 32-bit, there is a performance hit. However, this product is intended as an interim solution until the full 32-bit 6.0 version is developed sometime in 1994.

Another important OS/2 developer is DeScribe, maker of the OS/2 word processor of the same name. DeScribe is a 32-bit product boasting many of the same features as the high-end DOS and Windows word processors and a few special features all its own. DeScribe has been available for OS/2 since version 1.1.

Hilgraeve has the top-selling communications product for OS/2, HyperAccess 5 3.1. It boasts network support (giving you the ability to use shared modems over a LAN), all of the popular download protocols, scripting with script learning, and many other features. Using host mode, you can control the host computer and even run DOS and OS/2 text-mode applications over the telephone lines from a remote computer.

Stac Electronics, the creator of Stacker, has released version 3.1 for OS/2 FAT systems. It provides on-the-fly file compression. It comes with both OS/2 and DOS drivers. Currently, OS/2 can't read PC-DOS or DOS 6 compressed volumes. Stac Electronics offers a special package for owners of DOS 6 that includes a conversion utility to convert Dou-

bleSpace volumes to Stacker volumes which are readable under both DOS and OS/2.

Soft Touch Systems makes a set of file- and disk-related tools called the GamaTech Tools. This is an essential package for OS/2. It handles both HPFS (the optional High Performance File System for OS/2) and FAT (the standard DOS file system). These utilities optimize, repair, and provide general maintenance for files and disks. They also provide file locking, system protection against boot-sector modification, and more.

Of course, Borland International has released an excellent OS/2 2.0 C/C++ compiler (a COMPUTE Choice Award finalist). Borland is currently working on an upgrade for the added functionality of OS/2 2.1. With the popularity of Borland development tools, more applications should soon appear as a result of Borland's interest in the operating system.

An indispensable book on getting the most out of OS/2 is *OS/2 2.1 Unleashed* by David Moskowitz, David Kerr, and others (published by Sams, 11711 North College, Carmel, Indiana 46032).

The major drawbacks of OS/2 are the question of future Windows compatibility and the hardware demands. With Windows-to-OS/2 ports becoming commonplace, perhaps compatibility isn't so much of an issue anymore.

On the hardware front, OS/2 requires at least a 386 and 4MB of RAM as well as 15MB to 40MB of disk space for installation. This is the minimum that will provide you with all of OS/2's capabilities. As you add more memory, you'll see more speed and efficiency. When you consider the requirements for Windows NT, OS/2's requirements are modest by comparison. □

Third-party support and compatibility are major concerns of users considering OS/2.

The industry is responding with ports and original programming that make this operating system even more attractive.

With COMPUTE's SharePak, You'll

# SHARE IN THE SAVINGS!

## SAVE TIME

We carefully select and test all programs for you

## SAVE MONEY

Each disk includes two to five programs for one low price

## SAVE KEYSTROKES

Our free DOS shell lets you bypass the DOS command line



Luck won't help you with Raku Master.

Give your logic skills a fun workout in MiceMen.

### Raku Master

Raku Master is a pure logic game that will challenge all serious puzzle lovers. The object of the game is to flip all the red tiles back to gray in as few moves as possible. You can flip up, down, or diagonally, starting with any tile. The Raku Master will tell you the exact number of moves in which he can solve the puzzle. If you don't believe it can be done, let him show you the solutions for the first 10 of the 50 puzzles.

### MiceMen

MiceMen is another exciting, fun-filled, animated strategy game. Push and pull columns of cheese blocks to get your mice to the other end of the maze before the computer opponent beats you to the punch.

### Aquanoid

If you're craving pure arcade excitement, give Aquanoid a try. This game is similar to the arcade classics Breakout and Arkanoid, so you'll need a sharp eye and a quick hand to get the high score.

**COMPUTE's SharePak** disk contains the best of shareware—handpicked and tested by our staff—to complement this month's focus. You'll sample entertainment, learning, and home office software at a great savings. Each SharePak disk includes two to five programs plus complete documentation for one low price:

\$5.95 for 5¼-inch disk  
\$6.95 for 3½-inch disk

**For even more savings, subscribe to SharePak and receive COMPUTE's SuperShell FREE!**

For a limited time, you can subscribe to COMPUTE's SharePak and save more than 37% off the regular cost of the disks—plus get COMPUTE's SuperShell FREE. With a one-year paid subscription, you'll get

- A new 3½- or 5¼-inch disk delivered to your home every month
- Savings of over 37% off the regular disk prices
- Advance notices of COMPUTE special offers
- COMPUTE's SuperShell at no additional cost!

Subscribe for a year at the special rates of \$59.95 for 5¼-inch disks and \$64.95 for 3½-inch disks—and get **COMPUTE's SuperShell FREE!**

COMPUTE's SuperShell requires DOS 3.0 or higher. Disks available only for IBM PC and compatibles. Offer good while supplies last.

### For Single Disks

Please indicate how many disks of each format you would like:

\_\_\_\_\_ 5¼-inch at \$5.95

\_\_\_\_\_ 3½-inch at \$6.95

\_\_\_\_\_ Subtotal

\_\_\_\_\_ Sales Tax (Residents of NC and NY, please add appropriate sales tax for your area. Canadian orders, add 7% goods and services tax.)

\_\_\_\_\_ Shipping and Handling (\$2.00 U.S. and Canada, \$3.00 surface mail, \$5.00 airmail per disk)

\_\_\_\_\_ Total Enclosed

### Subscriptions

I want to save even more! Start my one-year subscription to COMPUTE's SharePak right away. With my paid subscription, I'll get a FREE copy of COMPUTE's SuperShell plus all the savings listed above.

Please indicate the disk size desired:

\_\_\_\_\_ 5¼-inch at \$59.95 per year \_\_\_\_\_ 3½-inch at \$64.95 per year

For delivery outside the U.S. or Canada, add \$10.00 for postage and handling.

**Important Notice:** COMPUTE's SharePak is not associated with COMPUTE's PC Disk. Please order SharePak separately.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_ ZIP/Postal Code \_\_\_\_\_

Total Enclosed \_\_\_\_\_

\_\_\_\_\_ Check or Money Order \_\_\_\_\_ MasterCard \_\_\_\_\_ VISA

Credit Card No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_ (Required)

Daytime Telephone No. \_\_\_\_\_

Send your order to COMPUTE's SharePak, 324 West Wendover Avenue, Suite 200, Greensboro, North Carolina 27408.

All orders must be paid in U.S. funds by check drawn on a U.S. bank or by money order. MasterCard or VISA accepted for orders over \$20. This offer will be filled only at the above address and is not made in conjunction with any other magazine or disk subscription offer. Please allow 4-6 weeks for delivery of single issues or for subscription to begin. Sorry, but telephone orders cannot be accepted.

# ART WORKS

Robert Bixby

## IN CAPTIVITY

There are a number of options for capturing a screen either in Windows or in DOS. The quickest and easiest way to save a Windows screen is to press PrintScreen in Windows. That saves the entire Windows screen to the Clipboard. You can then save it as a CLP file or paste it into Windows Paintbrush (the technique for this is covered in "Built-in Windows Power Tools" in the November 1993 COMPUTE), edit it, and then save it as a BMP or a PCX file. You can save only

ing not only a viewer and editor but also an image catalog that displays thumbnails of images. You can also capture from DOS, edit pictures, and convert images individually or as a batch. Collage Complete comes with a two-disk sample clip art collection.

Collage Complete for Windows has two separate icons: one for the capture program and one for the image-editing and -cataloging program. You have the option of capturing the active menu, title bar, menu bar, client, or window, the whole screen, custom co-

ordinates, multiple selections, or last coordinates. You can set the timer from 0 to 300 seconds. You can capture images to any of ten formats (including TIF, PCX, BMP, and GIF) in any of the following color levels: 16 gray

manipulation program is the most complete, but its interface is a little overwhelming. Graphics Tools (Delta Point, 2 Harris Court, Suite B-1, Monterey, California 93940; 408-648-4000; \$99.00) offers a slightly expanded features list including autotrace and a bonus CD-ROM that contains 700 pieces of clip art, 100 photographs, and demonstration versions of other Delta Point programs. Delta Point is known for its charting program, Delta Graph and Freeze-Frame (\$69.95), another image-capture and file-conversion application.

Graphics Tools will capture and convert among more formats than Collage Complete, but it gives less control over the image as it is captured. The image is captured as a TIF file, for example, but you cannot tell it to capture in monochrome or 16 million colors. You can capture freehand, a window, specified coordinates, an area, or full screen. If you elect to capture a window, you can refine the capture to a menu, an icon, or a dialog box by clicking on the object you want to capture. The only way to capture a DOS screen with Graphics Works is from within Windows.

Whatever you choose, you'll find that graphics manipulation has entered an era of extreme interoperability.

Have a DTP tip you'd like to share? Let me know about it by calling (900) 884-8681, extension 7010203 (sponsored by Pure Entertainment, P.O. Box 186, Hollywood, California 90078). The call costs 95 cents per minute, you must be 18 or older, and you must use a touch-tone phone. Or write to "Art Works" in care of this magazine. And if you don't have a tip, call to let me know what you're up to, what software you're using, and how I can be of assistance. □

Image cataloging adds another level of convenience to Collage Complete.



the active window by pressing Alt-PrintScreen.

Clif Karnes has written a program called Clip-In (which he may soon release as shareware) that will capture to the Clipboard individual elements of the Windows screen, such as a scroll bar, a dialog box, an icon bar, or an area you define yourself.

With so many alternatives available, commercial publishers have to go a long way to earn your dollar.

Collage Complete (Inner Media, 60 Plain Road, Hollis, New Hampshire 03049; 603-465-3216; \$199) is the successor to the fast and flexible Collage Plus. My only complaint about Collage Plus: It was difficult to get a look at the pictures captured. Collage Complete eliminates that problem by provid-

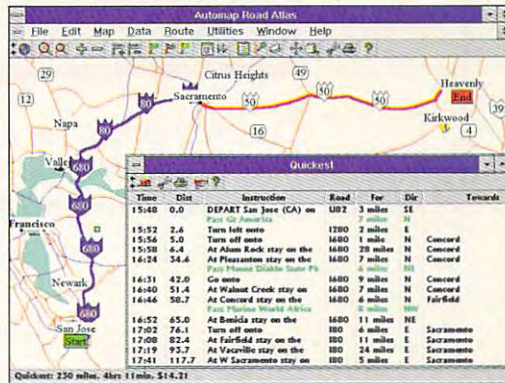
ing scale, 256 gray scale, 16 colors, 256 colors, 16 million colors, or monochrome. It supports TWAIN, so you can use your TWAIN-compliant scanner to scan images directly into Collage Complete.

Pizazz Plus 4.0 (Application Techniques, 10 Lomar Park Drive, Pepperell, Massachusetts 01463; 508-433-5201; \$149) has the simplest collection of tools under Windows of the three, but it can save to an incredible range of formats, most identified by applications, for which the image is custom formatted. It also has a recorder that remembers the transformations you perform on a graphic and can reproduce them on another graphic. The macro (called a recipe) can then be saved to disk.

Pizazz's DOS capture and



VS.



# Smooth out your travel planning with Automap.

Don't let bulky, worn-out maps put a crimp in your plans. Simply load the new version of *Automap® Road Atlas* for Windows or DOS onto your PC. In seconds, Automap will help you quickly and simply plan the ideal route to more than 120,000 places in the USA and Canada. You'll save time, money, and hassle.

Find places of interest along your route and calculate gas consumption with the new version 3. Or expand your horizons with two exciting new add-ons: Check out more than 8,000 great destinations overseas with *Automap Destination Europe*. And explore nearly 600 North American ski resorts with *Automap Destination Ski*.

Automap puts you in the driver's seat for planning travel. Just select how you want to drive—lead-foot or laid back. Ask for the quickest, shortest, or alternative routes. Press a button and print out detailed maps and directions. Automap is fast, fun, and *affordable*. So drive straight to your nearest software retailer today and ask for Automap Road Atlas, or call **1-800-440-MAPS**.



**Automap Road Atlas**  
The Easiest Way to Get From Here to There



**Automap Destination Series**  
More Places to Go

**AUTOMAP®**

Automap, Inc. 1309 114th Avenue SE, Suite 110, Bellevue, WA 98004. Tel: (206) 455-3552  
Fax: (206) 455-3667

Automap Road Atlas SRP \$99.95. Upgrade to Version 3.0 SRP \$39.95.  
Automap Destination Europe (SRP \$49.95) and Automap Destination Ski (SRP \$29.95) are  
add-on products to Automap Road Atlas.

Requirements: Windows version: Microsoft Windows 3.0 or above in standard or enhanced mode. DOS version: DOS 3.0  
or above, 640K RAM. Destination Series add-ons: Work with any copy of Automap Road Atlas Version 3.

© Copyright 1988-1993, NextBase Ltd. Automap is a registered trademark of NextBase Ltd.

Circle Reader Service Number 137

[www.commodore.ca](http://www.commodore.ca)

# DISCOVERY CHOICE

*Dazzling graphics, full-motion animation, and crystal-clear sound effects bring dinosaurs to life as you learn the facts about these fascinating ancient creatures.*

Scott A. May

## MICROSOFT DINOSAURS

They say everything old eventually becomes new again. It must be true, because you can't get much older, yet more in fashion, than dinosaurs. From children's playful TV pals to big-screen terrors, these ancient creatures seem to fascinate us more than ever. Despite the renewed interest, however, myths and misconceptions persist. Microsoft helps bridge the gap between paleontology and pop culture with *Dinosaurs*, a brilliant interactive journey that takes you back in time.

True to its larger-than-life subject matter, this multimedia Windows CD-ROM packs a huge amount of information—nearly 400MB, including full-motion video, fantastic audio, and a gallery of beautifully scanned artwork. The main program weighs in at over 200MB, featuring a dazzling display of more than 1000 illustrations, 200 hypertext articles, and 800 pop-up windows. For dinosaur lovers, about the only thing better than this would be living next door to New York's American Museum of Natural History.

Big numbers are impressive, but they don't guarantee a good program. Atop this mass of megabytes sits a fabulous interface that allows the curious to explore in four ways: Atlas, Timeline, Families, and Index. For the timid, there's also Guided Tour, which is hosted by "Dino" Don Lessem, founder of The Dinosaur Society and editor of the *Dino Times*. His soft, folksy style uses humor to hook our curiosity and expert knowledge to keep us following his



lead on 16 different tours. You can abandon a tour at any time if you find a subject that piques your interest. Unfortunately, there are no video bookmarks, which would allow you to quickly return to specific points of interest.

Atlas takes you where dinosaurs roamed, areas divided into six geographic regions: North America, South America, Europe, Africa, Asia, and Australia. Learn how each species adapted to its particular climate and social order. A fascinating sidebar, *The Shifting Earth*, offers a crash course in plate tectonics. Here you'll see how land movement created new continents, restricting animal migration and possibly dooming some species to early extinction.

In addition to the interesting sidebars that offer explorers more information, most of the program's screens sport special hot spots—hypertext links to additional information. Click next to *Dimetrodon*'s sail to learn how this "reptile radiator" helped regulate the giant lizard's body temperature. Branch off yet again to discov-

er creatures with similar radiator sails, such as the warm-blooded *Spinosaurus*. Like any good reference, these hot spots allow your imagination to wander. There are no wrong moves or dead ends, and to backtrack, you simply click on the back icon.

Timeline begins with a graphic representation of the earth's history, divided into four major eras: Precambrian, Paleozoic, Mesozoic, and Cenozoic. Each era is then broken into small chunks of time, called periods. You'll learn that all dinosaurs lived during the Mesozoic era—divided into the Triassic, Jurassic, and Cretaceous periods—roughly 160 million years, yet merely a drop in the cosmic bucket. When viewing such a grand scale, you can't help but be humbled by man's meager stake on terra firma. The Mesozoic era holds many hypertext links to the Atlas section, particularly the Cretaceous period, when dramatic plate movement and rising seas helped isolate many species. The end of this era saw the end of the dinosaurs. The



program offers several dramatic theories to explain the cause of their extinction, as well as clues to some species that may have survived.

The section on families proves especially interesting for fledgling dinosaur explorers. It teaches the difference between the two main orders of dinosaurs—saurischians and ornithischians—designated, remarkably, by hip structure. You'll also discover that some creatures often mistaken for dinosaurs were actually reptiles, such as the flying Pterodactylus and Quetzalcoatlus. The who's who of dinosaurs is in this section, including the meanest (Tyrannosaurus Rex, of course), biggest (the plant-eating Sauropods), and smallest (the chicken-sized Compsognathus), among others.

Are you tongue-tied by these strange, multisyllabic names? You're not alone. That's why the designers included spoken pronunciations, one of the program's best features. Click on the speaker icon next to particular words or phrases, and you'll hear them pronounced in crystal clarity. Cindy Shrieve provides the voice; she also speaks the introductions to sidebar stories.

The fourth navigational option, Index, allows speedy access to every major article and species. Entries are both alphabetized and graphically displayed. Browsing through Index is also an excellent way to find articles on subjects you might otherwise miss, such as the fascinating art of skeletal reconstruction.

The program's multimedia highlight—six full-motion mini-movies—was added almost as an afterthought just prior to

release. Culled from the PBS series "The Dinosaurs," most feature quality animated watercolors, sound effects, and narration. The centerpiece film, *The Hunt*, was taken from Phil Tippett's 1984 work, *Prehistoric Beasts*. Filmed with stop-motion models, intricate backgrounds, and horrific sound effects, this exquisite animation depicts a deadly encounter between a Triceratops and a T. rex.

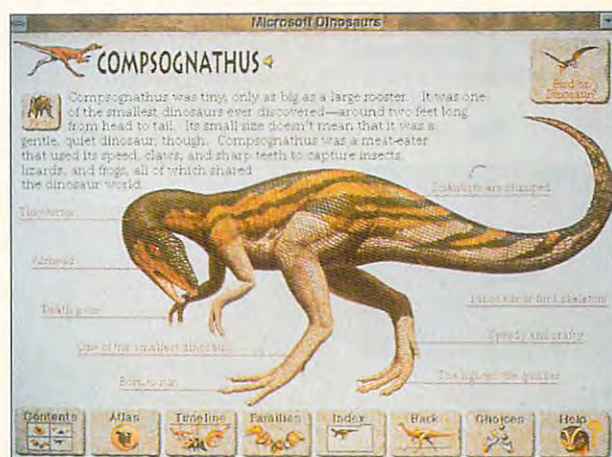
The program detects your current Windows graphics mode—either 16- or 256-color VGA—and loads the appropriate version. As you'd expect, the 256-color VGA graphics are stunning, from the stone-textured icons to the scanned artwork and digitized photos. The big surprise is the outstanding quality of the 16-color VGA version: Apart from only a slight loss of detail due to the dithering process, the graphics are just as attractive using a 16-color palette. This is especially good news for users with unaccelerated video cards, as well as those who simply don't want to switch video modes to run the program. Somewhat of a system hog, the program task-swaps well but prefers your system's undivided attention. Running resource-heavy applications in the background will slow Dinosaurs to a crawl.

Microsoft forgoes a printed manual in favor of online graphic help screens. Overview Movie is a special feature that helps new users; a talking tour of the program's main functions, it's delivered in the humorous style of a vaudeville revue. Another helpful option is the ability to print virtually any screen or active window, in either gray scale

or full color. The overall quality is excellent, but because these are screen dumps, graphics will print better when they're displayed in 256-color mode.

Believe it or not, there's more: Attached to each dinosaur profile is a Fact Card, a printable index card containing a full-color picture, an information chart, an interesting fact, and a scale drawing. And there's the dinosaur art

**IBM PC or compatible (80386SX compatible), 4MB RAM, 16- or 256-color VGA, hard drive with 2.5MB free, MPC-compliant CD-ROM drive, mouse, MPC-**



gallery, complete with 50 high-quality pictures that can be exported via the Clipboard or turned into wallpaper for a Windows background. There are even two built-in screen savers, your choice of stomping dinosaur feet or dinosaur heads. Finally, a slide-show option displays randomly selected program screens for those who simply can't decide where to begin.

Both highly entertaining and educational, Microsoft Dinosaurs is a wonderful blast from the past. The next time you're asked what the storage capacity of a CD-ROM is, just smile and say, "About 160 million years." □

**compatible sound card, Windows 3.1 or higher—\$79.95**

**MICROSOFT  
One Microsoft Way  
Redmond, WA 98052-6399  
(800) 323-3577**

Circle Reader Service Number 392

# GAME INSIDER

Shay Addams

## THE YEAR OF THE SIM

MicroProse, acquired recently by Spectrum HoloByte, has quietly killed its animated adventure game department. In early fall it shipped Bloodnet, a role-playing game from the Paragon design team, but Dragonsphere will be the last such quest, and the company is also dubious about a follow-up to Darklands.

MicroProse will return to producing the kind of games that made it famous: simulations such as F-14 Fleet Defender, which should be on the shelves now, and strategy games like Sid Meier's Civilization. The Civil War sim Meier was working on has been put on hold until at least the fall of 1994 while he finishes CPU Bach for the 3DO. And he may decide to do an add-on for Civilization (or even a brand-new version) first—maybe something like Civilization in Space. MicroProse's new Coaches Club Football simulation and a space strategy game called Masters of Orion should already be in the stores.

**More sims.** Simulations continue to multiply, perhaps because so many kinds of games—planes, tanks, city builders—fall into this category. One of the most unique is Detroit, Impressions' ultimate automobile simulation. Detroit re-creates various aspects of the automobile industry by providing the tools for designing and mass-producing your own car. Marketing plays an important role in this resource-management challenge.

Interplay is doing CD-ROM versions of Maxis's SimCity, SimEarth, and SimAnt. The company is revamping each game extensively and adding digitized video. A 40-person film crew is currently shooting

footage for the CD-ROM version of SimCity, which is due out in the spring. The SimAnt CD-ROM should be on the shelves now. Interplay also released a CD-ROM version of Alone in the Dark recently, and at press time the company was saying that it hoped to ship an Interplay tenth-anniversary CD-ROM with Wasteland and nine more of its biggest hits by Christmas. Stonekeep, Interplay's landmark role-playing game, is now set for a spring release.

**Not a simulation.** The computer game industry is a bizarre one. You'd expect the hottest title from a company called Strategic Simulations to be a simulation, or at least a strategy game. But it's actually the latest release in the AD&D role-playing series, an all-new world set in the time of *The Arabian Nights*. Al Qadim is the name of the fantasy world, and Genie's Curse is the first role-playing game that takes you there. Unlike most AD&D games, it's a one-character quest. Your character is pregenerated, allowing you to jump right into the action.

You can get a batch of adventures in Legend Entertainment's Spellcasting Party Pak, which contains all three of Steve Meretzky's wacky Spellcasting games. Two recent Legend adventures, Eric the Unready and Gateway 2, have been released on CD-ROM. For something new from Legend, try Companions of Xanth, which sports a new, easier-to-use interface. Legend's Bob Bates calls the adventure, based on the works of popular fantasy writer Piers Anthony, the company's "most beautiful" adventure.

**Better late than never?** You may have noticed that a few of the games I reported on in recent columns have inexplicably missed their ship dates—

not an unheard-of event in the world of computer games, certainly, but that's no excuse for less-than-accurate coverage by a game insider such as myself. Sir-Tech has rescheduled Jagged Alliance from last fall to this spring, for instance. The second title in its Realms of Arkania series, Star Trail, is now planned for January or February. LucasArts' The Dig, Brian Moriarty's graphic adventure, is now set to hit the shelves in late spring. (I did learn that the mysterious Hollywood type involved in the project is none other than *Jurassic Park* producer Steven Spielberg. After deciding that a story he wanted to produce for the screen might work better and cost less as a computer game, he teamed up with Moriarty at LucasArts.) However, last month, when I said TIE Fighter would dock in time for Christmas, that was *my* mistake—I confused it with B-Wing, the X-Wing mission disk. TIE Fighter is a spring product.

**Buttoned down for a dogfight.** The most effective flight peripheral I've seen in years is the new CH Flightstick Pro. Based on the classic CH Flightstick, it's armed with three extra buttons atop the stick and a coolie hat that serves as a four-way switch. All the advanced flight sims support the new buttons for game-specific functions such as dropping bombs or switching guns. Most of them use the coolie hat to shift between views from the cockpit. I've seen similar features on more expensive joysticks that weren't as well engineered, and I highly recommend the Flightstick Pro. (The extra buttons require a two-stick game card; many inexpensive multifunction cards only support one stick.) If this stick doesn't improve your scores, you may as well go back to Pong. □

MicroProse  
returns to its roots  
with F-14  
Fleet Defender.



Over one hundred  
play areas to test  
your reflexes  
and intelligence.

# GEAR WORKS!

This puzzle game  
will keep your gears  
spinning!

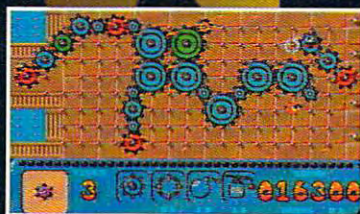
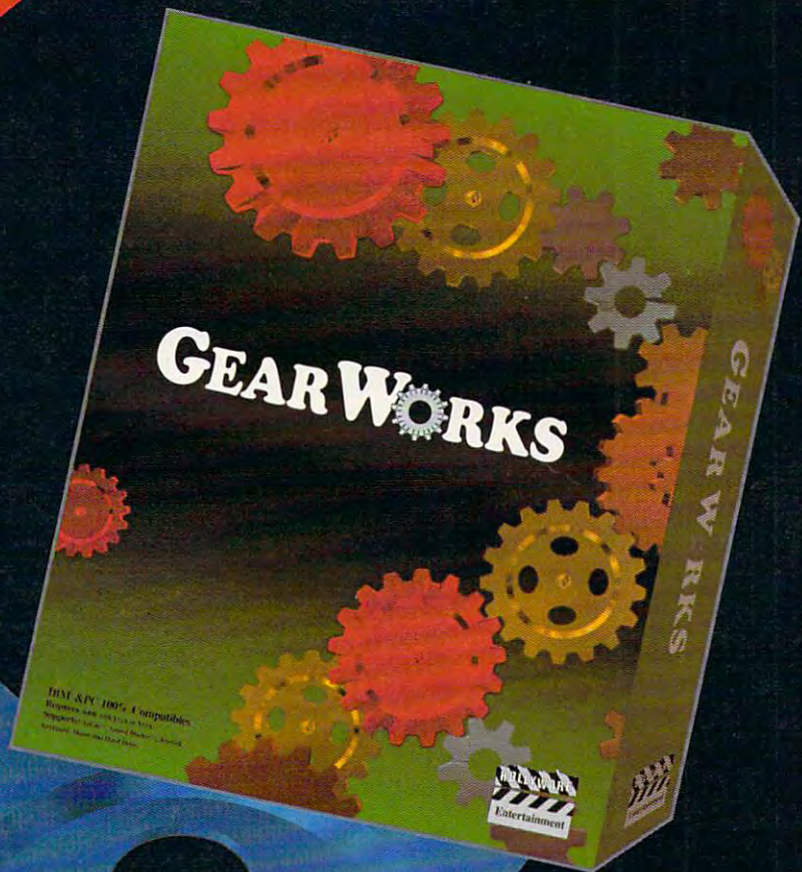
Gear Works is the most unique puzzle game to hit the market in years. In Gear Works you will connect gears of various sizes and colors together in order to transform Twelve Wonders of the Ancient and Modern world into time pieces, while racing against time and friction. Watch out for the Pottins, two gremlin like creatures, that will torment you by rusting the gears and breaking off the mounting pegs.

Game features: Various gear types, over one hundred puzzles to solve, bombs to blow up incorrectly placed gears and a gun to shoot those pesky Pottins off the play area.

Available in IBM PC and Amiga computers.

Check your local retail stores for Jonny Quest®-Curse of the Mayan Warriors and other HOLLYWARE Games.

Circle Reader Service Number 117



HOLLYWARE ENTERTAINMENT P.O. Box 9148 Marina Del Rey, Ca. 90295 (310) 822-9200

See your Local Software Retailer or call HOLLYWARE Entertainment. Copyright © 1993 HOLLYWARE Entertainment, Trade Mark TM 1993 Sony Electronic Publishing.

# ENTERTAINMENT CHOICE

*Lead fleets of starships in interstellar battles as you fight to save the Federated Worlds in this realistic space-opera simulation.*

Keith Ferrell

## RULES OF ENGAGEMENT 2

Can software re-create science-fiction experiences? This is a question that's been addressed by most of the major entertainment software publishers at one time or another. For some publishers, it's the question. Omnitrend, for example, has devoted most of its energies over the past decade to creating interactive interpretations of a particular type of science fiction, the space opera. Its latest game, Rules of Engagement 2, may well be the finest science-fiction simulation ever developed.

Space opera is one of the grand traditions of literary science fiction. Like its antecedent, the horse opera, space opera works from several givens. Fleets of mighty starships substitute for the cavalry and the bad guys. Space operas often are set along frontiers, with colony worlds serving the roles played by prairie towns. Climactic battles are preceded by smaller confrontations, the stakes rising with each new conflict.

Of course, horse operas are pretty much restricted to rifles, pistols, and the occasional Gatling gun, while the space opera at its most ambitious can hurl whole solar systems into different continua. *Crashing Suns*, for instance, is the title of one of the earliest space operas.

At its best, space opera is more than just adventure fiction. Good space opera should be good science fiction as well, taking place in a carefully designed and delineated universe that is self-consistent within the bounds of the story that contains it.



Space opera—or what passes for it—has played a large part in the interactive entertainment explosion. And that's not surprising, as space opera has played perhaps the dominant role in all electronic media forms of science fiction. "Star Trek" is essentially a space opera, and the Star Wars saga is little more than that. Interactive space opera has tended to follow the Star Wars pattern: lots of arcade action, speed, bells and whistles, and little attention to or reflection upon what actual interstellar combat might be like.

That sort of reflection and attention is exactly what Omnitrend has brought to its science-fiction simulations. Its simulations follow three separate, though interlocked, tracks, all set within the same universe. One of the Omnitrend series, *Universe*, deals with interstellar exploration, trade, and settlement. Then there's the *Breach* series, which focuses on ground-combat troops. And third is the *Rules of Engagement* group, which puts players in charge of fleets of military starships.

All of the games take

place in the same self-consistent universe, and a very strange and dangerous place that is. Like most good science-fiction universes, this one has a history. According to the Omnitrend scenario, over the next century the human race develops faster-than-light travel and begins the colonization of planets in our local galactic area. Humans being a fractious species, factional differences develop, and humanity splits into two groups: the Federated Worlds (you) and the United Democratic Planets (them).

There are also aliens of various levels of malevolence and competence. And, in the best science-fiction tradition, there are remnants of an ancient and very advanced species. This is a remarkably well thought out universe, full of details that lend just enough credibility to suspend disbelief. As illusions go, the Omnitrend universe is quite convincing.

Of the games set in this universe, *Rules of Engagement 2* is by far the most ambitious. It's a campaign-oriented game: You start out as a ca-

det and work your way up the ranks, facing larger challenges and commanding more powerful forces with each advancement. A beginner campaign is included, but you'll quickly find yourself facing large combat and command challenges.

Command, not incidentally, figures largely in the game. In the more advanced scenarios, you'll find yourself with whole fleets of ships at your disposal. It's your responsibility to select individual ship commanders from the roster of those available. All the characters have their own traits, competencies, and vulnerabilities—any one of which can affect how they respond to your orders.

Once you embark upon a campaign, you're in the center seat of the flagship, which can be a lowly transport traveling solo or a mighty dreadnought leading a fleet, depending upon the mission configuration. (Actual ship selection is up to you, but each scenario gives you only a certain number of configuration points to spend, which means that you can't get the best ship every time.)

The command interface is a marvel: Not only is it effective and sensible, but it also has a design that serves to enhance the game's illusion. This thing feels like a starship command center.

You're presented with a variety of ship systems: tactical, navigational, communications, damage control, and docking. Within each system are subsystems specific to tasks at hand, such as selecting missiles for combat or loading and unloading cargo. Your monitor screen can be divided into command quad-

rants, with the quadrants displaying different systems or subsystems within a larger group. Tactical command, for example, gives you access to fire control, defensive shields, positioning relative to the enemy, and more. Included in communications are both transmission and reception. Navigation houses the helm, maps, and long-range sensors. You'll learn quickly which arrangements work best in different situations.

You'll also learn—with luck, rapidly—to coordinate the systems during combat. Often, your enemies are better armed and equipped than you. The simulation gives you the tools necessary to crack each scenario, but it requires you to learn as you go; of course, that further enhances the game's career advancement motif.

If you also play Omnitrend's Breach series, you can interlock the games, moving from Rules of Engagement 2's starship command to Breach's ground-force command as you board and seek to capture enemy installations. The next release of Universe will also interlock with Rules of Engagement and Breach.

Documentation is extensive, thorough, and refreshingly well written. You'll want to pay attention to the breakdown charts of ship and system capabilities; there's information there that will affect your weapons selection and possibly turn the tide of desperate battles.

And the battles do get desperate. Systems can be damaged or knocked out; capabilities can be diminished. Allies respond in realtime, and the clock is always running. You

may need full power in three minutes, to borrow a cliché from another space opera, but if the simulation runs six minutes before full power is available, you may be out of luck. There are no TV space-opera miracle workers here.

Rules of Engagement 2 is a high-level simulation that demands good equipment. It will run on a slow 80386, but a faster machine makes it sing. (Actually, it talks, if you have sound support.)

Scenario design has become an important pastime

**16-MHz IBM PC 80286 or faster (25-MHz 80386SX or faster recommended), 640K RAM (2MB recommended), VGA, hard drive with 8MB free; supports Microsoft-compatible mouse, math coprocessor,**



for Omnitrend fans, and with Rules of Engagement 2, the company has gone so far as to prepare a special developer's kit, which you can purchase directly from Omnitrend. Additional scenarios for the game are already popping up on bulletin boards and online services.

Rules of Engagement 2 is a serious simulation and a masterpiece of interactive science fiction. Software space opera doesn't get any better than this. It's a game—and a vision of the space-operaic future—that would do Poul Anderson, Jack Williamson, or E. E. Smith proud. □

Circle Reader Service Number 393

**and Sound Blaster, Ad Lib, Roland, and Pro AudioSpectrum sound cards—\$69.95**

**IMPRESSIONS SOFTWARE**  
222 Third St.,  
Ste. 0234  
Cambridge, MA  
02142  
(617) 225-0500

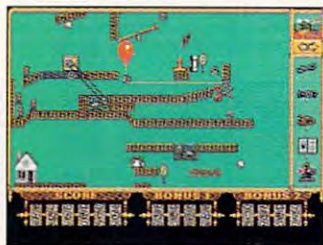
# GAMEPLAY

Denny Atkin

## COASTERS AND RUBE GOLDBERG

And now for something completely different! Only computer gamers could find themselves in a rut because they've spent too much time exploring dark dungeons, flying F-16s, and playing professional football. If you want to try something really different, both Disney and Sierra/Dynamix offer breaks from the ordinary. And amazingly, in today's world of 20MB games, each of these games ships on

The Even More Incredible Machine presents you with 160 Rube Goldberg-esque challenges.



a single high-density floppy.

**Coasting along.** Disney's Coaster takes you off the flight line and into an amusement park, but at the speeds and altitudes you'll reach here, you may forget you're not still flying a jet fighter. This program, originally announced last year, is a construction set that lets you build, test, and ride your own roller coasters.

You'll start out in the Coaster Design section, where you can create your ride from scratch or modify one of a number of existing designs on a 640 x 480 VGA screen. You've got straight track, curves, loop-the-loops, and corkscrews to choose from. Sections can be different lengths, they can climb or plunge at angles up to 60 degrees, and they can twist up to 50 degrees in curves. Sections of track can be lifters or accelerators, or they can be equipped with brakes. You'll

need a mouse for this section of the program, which has to be one of the easiest-to-use construction sets I've ever encountered.

Track design is fun, but you've got to be careful. One of the most difficult aspects is making sure that the final section of track can actually wrap around and meet the platform again. If you ever created your own track layouts with model trains or electric racecars when you were a kid, you'll recognize this difficulty—you create what would have been the perfect layout, except there's no way to get the track back to where you started building it.

Once your track is laid out, it's off to the Ride screen. Just select Ride from the pull-down menu, and you're in the coaster car. Note that if you haven't installed the upstops, which keep the car from flying off the track, or if your track ends in midair, you won't be able to get anyone to board your coaster. Click the mouse button to launch, and you're in for a wild ride. Fast graphics and realistic sound effects make the ride a fun experience, but it's not very interactive. You do have buttons to accelerate or brake if you find that you haven't quite planned the proper amount of momentum in your coaster design, but that's the limit of interactivity here. Most of the game is in the designing, not the riding. After the ride's finished, you can get opinions on your coaster from a panel of evaluators. These will range from "Well, lasso me to a bronco! That was one of the best trips I've ever had!" to "I've seen better speed bumps at the post office." The Signature screen lets you examine a graph that shows the lateral and vertical g's achieved, maximum speed, longest drop, and other stats.

Once you've perfected your design techniques on Earth, you can try again with moon or Jupiter gravity, which can make for some interesting design problems.

Coaster is a winner in many respects. The only problem is that the graphic updates are too fast on a speedy PC, making loops nothing more than a blur. If you're the type who enjoys building for building's sake—if your fondest childhood memories involve Legos and Tinkertoys—you'll love this little game. It's a bargain at only \$24.95.

**TIM's back.** From Jeff Tunnell Productions comes Sierra/Dynamix's latest puzzler, The Even More Incredible Machine. If you played The Incredible Machine, you know what to expect, as TEMIM offers 160 new levels with everything that made the first game fun. If you're not familiar with the series, TIM and TEMIM essentially put you in the role of Rube Goldberg. You have to create complex, interconnected contraptions to accomplish goals that range from popping balloons to saving a little white mouse from a hungry cat. You connect pulleys, motors, jack-in-the-boxes, ropes, balloons, and many other parts to try to set off reactions that will accomplish your goal. The puzzles range from really easy to, at the end, well, really puzzling. My favorite aspect, though, is that the game is smart enough to let you win even if you pick a solution that may not have been what the programmers intended. Many times, I've solved the puzzles and had parts left over. TEMIM is extremely easy to learn, and both young kids and adults will find hours of enjoyment here. I know I did—I installed TEMIM at 9 p.m. and didn't get to bed until after 3 a.m., and many, many levels of play had passed. □

**BEWARE,  
THE SOUL OF YOUR MACHINE IS IN MORTAL DANGER!**

B R A M S T O K E R ' S



**Dracula**



**Psygnosis**  
675 Massachusetts Ave.  
Cambridge, MA 02139  
(617) 497-7794

If you can't find this game at your  
favorite retailer call:  
(800) 438-7794 (GET PSYG)  
to order your copy today.

# TRAVEL TO EXOTIC LANDS, MEET STRANGE CREATURES AND BLOW THEM AWAY!



If you can't find this game at your favorite retailer call: (800) 438-7794 (GET PSYG) to order your copy today.

You've always considered yourself a soldier of fortune with a knack for survival and a thirst for green. Your mission? Anything for a price. But this time it's different. The stakes are a little bit greater and the danger is all too real. You and your team are on a desolate moon, surrounded by less than friendlies, with only one goal besides the mission itself; stay alive long enough to enjoy your newfound wealth.

Hired Guns is an adventure that can accommodate up to four players simultaneously. It features furious non-stop action, first person 3-D view and auto-mapping of the 1.7 million cubic meters of play area. Choose from 12 different richly developed characters to suit your needs for the mission at hand. Journey through this desolate land, all the while testing your survival skills. And remember: TAKE NO PRISONERS!



Hired Guns is available on IBM compatible and Amiga formats.



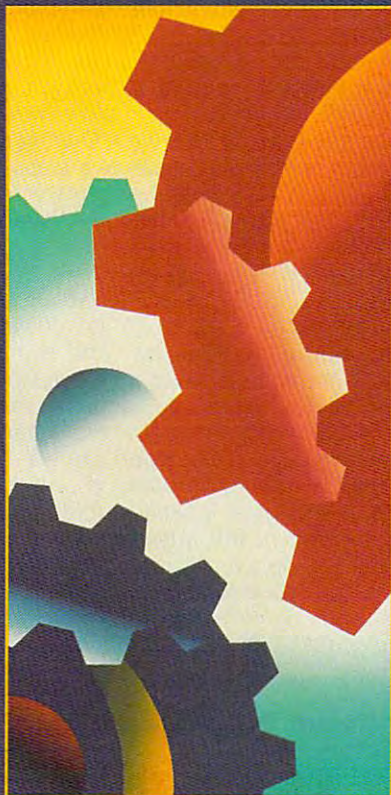
**Psygnosis**

675 Massachusetts Ave.  
Cambridge, MA 02139  
(617) 497-7794

Circle Reader Service Number 226 [www.commodore.ca](http://www.commodore.ca)



**There's  
no application  
that's more  
demanding on  
your PC  
than a good  
game—  
here's how to  
make sure your  
machine has  
what it takes to  
perform.**



# **BUILDING THE ULTIMATE GAME MACHINE**

**ARTICLE BY PAUL C. SCHUYTEMA**

[www.commodore.ca](http://www.commodore.ca)

Your face is washed in green from the infrared sensors; all around it's dark, silent except for the rhythmic whooshing of your rotor blades. Your left hand pulls back on the collective, increasing the lift of your Comanche helicopter. Your right hand thumbs your view left, then right; and the chopper lifts slightly, maintaining a steady hover in the South American night. Your feet, secured in control pedals, shift slightly, altering the speed of your tail rotor, twisting your craft starboard. A valley lies ahead—low passage into enemy radar territory. You push your joystick forward, cycling through your weapons systems with a thumb button. Only feet above the shallow river, airspeed nearly 200 miles per hour, you swoop in for battle.

A scene from the latest action movie? A training simulator for the new army? No, it's only a home computer resting on a desk in a small Midwestern town, and you're just playing a game.

What parents jokingly (and fearfully) called an obsession for their children—mindless, countless hours glued to a television set, Nintendo controller in hand—has evolved into a sophisticated, intelligent adult hobby. With the continued evolution of the PC and the savvy marketing strategies of the game-publishing industry, the PC game market has blossomed. Entertainment marketing leaders realized years ago that we adults, admittedly or not, want to play, and that we want more than just jumping, shooting, and collecting power pills: We want a complete experience.

But why is it that on your machine the latest, superhyped game is a dud? Your system probably doesn't have the power to entertain. PC games have evolved to a level of sophistication not even dreamed of a few years ago. It has only been in the past three years or so that PC games have begun to eclipse the playability of the Sega Genesis or the Super Nintendo systems. Even as late as a year ago, if you really wanted to play a great, fluidly animated football game, you had to look to cartridge systems. Now, thankfully, all manner of simulations and adventures abound on the PC, providing enough depth to entertain intelligent adults for months on end.

### The Price of Power

Of course, the cutting edge of entertainment software comes at a price. Nowhere in the PC software industry does a group of products ask more from its hardware. A typical flight simulator will push your computer to its

limit, making it breathe a sigh of relief when it merely has to calculate the sales statistics for a company of 500 employees. The games hitting the market now require the most powerful processors, hefty chunks of RAM, and large tracts of hard disk real estate.

In addition to the hardware requirements, the PC game market is rich with support systems, from peripherals such as sound cards or voice recognition systems to advanced, programmable flight controllers and even entire cockpit systems.

So what is a person to do? What is the ultimate PC game system? If you're a serious



*The CH Flightstick puts power in your hands and delivers ultimate control.*

hobbyist looking to set up a solid, long-lasting computer system, there are a few guideposts that will help you on your way. Follow these steps to build the ultimate game machine; then sit back and enjoy gaming as it was meant to be.

### Get a Solid Foundation

First, you'll want a solid base on which to build. Your CPU and memory capabilities are of utmost importance. Look into a 486DX2/66 computer system. Currently, the Pentium chip is still too new to be an absolute safe bet, but a 486 will provide you with enough computing muscle to handle even the most demanding game programs.

To support your CPU, you'll need RAM and hard disk space—and the more of it, the better. Don't even consider settling for anything less than 4MB of RAM. Ideally, you'll need a system with 8MB–16MB. You can have more than 16MB, but if you do, you run the risk of running into addressing problems and the potential for program crashes. So think twice before heading off to buy 32MB.

Your hard disk is probably your most vital asset, so choose a brand-name drive such as Quantum, Maxtor, Western Digital, or Seagate. As opposed to RAM, where too much

might not be a good thing, hard drive space is never, ever a hindrance. Buy as large a drive as you can afford. Consider a 200MB hard drive as the smallest to accept, with 400MB or more and a fast access time (less than 18 ms) as your best bet, unless you can afford better.

### Budget for the Best View

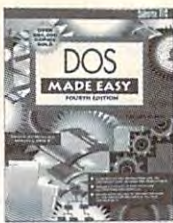
After storage, your monitor system is the most crucial component of your game system. Seek out the best non-interlaced monitor you can afford. One that's 15–17 inches is best, and make sure that it supports VESA standard modes. You'll also need a video card to control your monitor; there are plenty of good choices here. To shoot for the best, get a local-bus motherboard that supports the VL-Bus (see the November issue of COMPUTE for an overview of the various PC bus standards). This will allow your VL-compatible video card to operate at 33 MHz on an 80486/66 system (considerably faster than the 8-MHz ISA plain-vanilla video system used on most computers).

All computers come with a floppy drive, and a single 3½-inch drive is becoming the standard. Because of this, a 5¼-inch drive is no longer a necessity. You will, however, want a CD-ROM drive to sit in that vacant drive bay. Many systems now come bundled with CD-ROM drives at very reasonable prices, but be sure you get one that has a fast access time (under 300 ms) and is Photo CD compatible.

Currently, CD-ROM drives offer three different methods of getting the disc into the drive. First is the removable case: Much like the CD-ROM's own jewel box, it consists of a plastic housing with a metal shutter into which you place the disc; you slide the entire unit into the drive. The second method features a lightweight tray that slides out from the drive on which you place the disc, much as you do with audio CD players. The third allows the entire drive to slide out, flipping open its lid so you can insert the CD-ROM. While the first method can be annoying, it's a good choice if you'll have children using your system. A youngster is likely to force and break one of the integrated trays, necessitating a costly repair. The caddies are only a few dollars each, and you can buy several in which to store your most-used CD-ROMs or your children's CD-ROMs.

### Software Tricks Expand Your System

In addition to getting the right hardware, you'll need some software tools



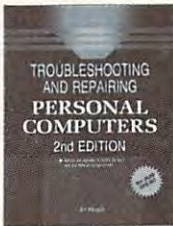
881896P \$19.95



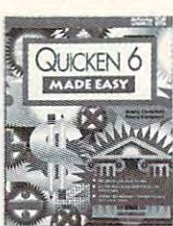
4220H-XX \$39.95  
Counts as 2/Hardcover



8818265P \$27.95



3677H-XX \$34.95  
Counts as 2/Hardcover



881890P \$19.95



881889P-XX \$29.95  
Counts as 2



4191P \$32.95



881821P-XX \$39.95  
Counts as 2



8818206P \$29.95



3922P \$16.95



4333P \$32.95



881900P-XX \$29.95  
Counts as 2



4089P \$18.95



881744P \$19.95



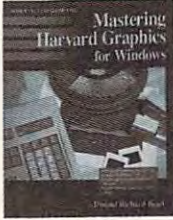
881907P-XX \$29.95  
Counts as 2



3769H \$31.95  
Hardcover



881869P-XX \$27.95  
Counts as 2



4186P \$22.95



881782P-XX \$29.95  
Counts as 2



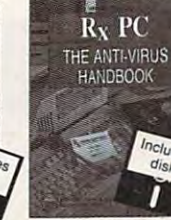
4069H-XX \$39.95  
Counts as 2/Hardcover



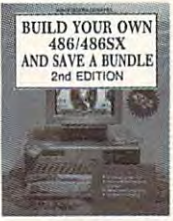
881731P \$19.95



3986P \$29.95



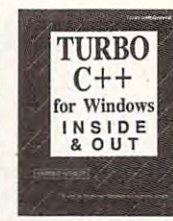
4262H-XX \$39.95  
Counts as 2/Hardcover



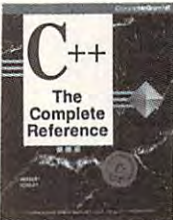
4270P \$19.95



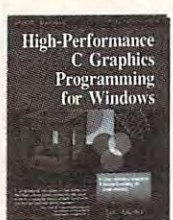
8818958P-XX \$24.95  
Counts as 2



881778P \$27.95



881654P \$29.95



4103P \$24.95

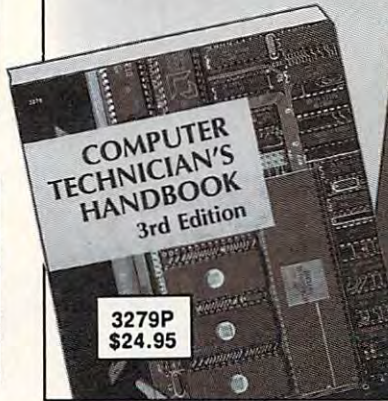


4072H-XX \$39.95  
Counts as 2/Hardcover

# Select any 5 books for only \$4<sup>95</sup>

(Values to \$157.75)

when you join the  
The Computer Book Club®



3279P  
\$24.95



4269H  
\$29.95  
Hardcover

## As a member of The Computer Book Club . . .

. . . you'll enjoy receiving Club bulletins every 3-4 weeks containing exciting offers on the latest books in the field at savings of up to 50% off of regular publishers' prices. If you want the Main Selection do nothing and it will be shipped automatically. If you want another book, or no book at all, simply return the reply form to us by the date specified. You'll have at least 10 days to decide. If you ever receive a book you don't want, due to late mail delivery of the Bulletin, you can return it at our expense. And you'll be eligible for *FREE BOOKS* through our Bonus Book Program. Your only obligation is to purchase 3 more books during the next 2 years, after which you may cancel your membership at any time.

CMPT194

All books are softcover unless otherwise noted. Publishers' prices shown. If you select a book that counts as 2 choices, write the book number in one box and XX in the next. A shipping/handling charge & sales tax will be added to all orders. ©1994 CBC

## Cache of Ultimate Games

Each month, the technology envelope is expanded, and games are able to do more to bring us a complete experience. Below is a list of essential games—some of the best software out there just waiting to feed off the power of your ultimate game system.

### Betrayal at Krondor

A fantasy game set within the fictional world of Raymond Feist's Riftwar saga, this game uses Dynamix's 3Space system (borrowed from the company's flight simulator programs), and the rotoscoped animation gives combat a hauntingly realistic feel. The game is played in chapters, and the depth of the characters and subplots is amazing. An 80486/66 allows you to set the movement increments to the smallest setting, creating the illusion that you're truly walking in this alien world.

Dynamix  
Distributed by Sierra On-Line  
(800) 326-6654  
\$69.95

### Comanche Maximum Overkill

This near-future helicopter simulator, which utilizes fractal mathematics to generate incredibly realistic terrain, has recently been improved by the addition of a mission disk. Now you can fly over icy streams and hot desert canyons, battling more tenacious opponents than before. Playing Maximum Overkill on an 80486/66 with the full array of Thrustmaster controls is an experience that shouldn't be missed.

Nova Logic  
(818) 774-0600  
\$69.95  
Mission Disk One—\$39.95

### Front Page Sports: Football Pro

For years, the animation required to make an entire football team look realistic was beyond the power of the PC; hence, we had years of programs with blocky running backs or simply numbers floating above the field. FPS: Football Pro and high-powered PCs have changed that. Now you can view rotoscoped players in realistic detail. FPS: Football Pro is an armchair quarterback's dream come true, with complete playbook editing, allowing you to create any type of offense or defense imaginable. With the ulti-

mate game setup, the play is smooth and fluid, and you rarely have to wait for the program to access the hard disk.

Dynamix  
Distributed by Sierra On-Line  
(800) 326-6654  
\$79.95

### Links 386 Pro

This photorealistic golf game is starved for computer power, but an 80486/66 is more than enough to satisfy it. Teeing off at Banff Springs, one of Access's latest courses, you have a breathtaking view of snow-capped mountains. Birds chirp in the background as your ball lands in the fairway, chipping distance from the green. As the view changes, the screen redraws in under five seconds on even the most realistic detail levels.

Access  
(801) 359-2900  
\$69.95  
Banff Springs course—\$29.95

### The 7th Guest

This is a milestone of computer technology, coming on two compact discs. The game places you inside an exquisitely rendered Victorian mansion. You must solve dozens of puzzles based on old Victorian parlor games and follow the adventures of six ghosts as they try to find the secret of the seventh guest. A fast computer is a must for this game, along with a fast CD-ROM drive and an advanced video card.

Virgin Games  
(800) 874-4607  
\$79.95

### Strike Commander

Origin's latest cinematic endeavor is a visually stunning F-16 flight simulator set in an interactive story in which you fly with a band of near-future mercenaries for hire. This game asks more from your computer than any other game released to date, but it rewards you with gorgeous graphics, a unique panning view made just for the Thrustmaster flight control system, and gameplay that will provide hundreds of hours of boggy-chasing enjoyment. With an 80486/66, you can perform quick, intuitive snap rolls and Immelmans without bogging down the processor.

Origin  
Distributed by Electronic Arts  
(800) 245-4525  
\$79.95

### VistaPro 3.0

While not a game, VistaPro is a fascinating product that allows you to render landscapes based on actual U.S. Geological Survey data. Using fractal technology and a wide assortment of options and controls, such as tree lines, haze altitudes, and cloud patterns, you can create superrealistic vistas of natural beauty. VistaPro allows you to create animations that take you on a journey through a virtual world. Rendering a scene at the highest detail levels takes just five minutes on an 80486/66.

Virtual Reality Laboratories  
(800) 829-VRLI  
\$129.95

### World Circuit

Get ready for a feeling of speed so mesmerizing that after playing, your real car will seem like a hopelessly underpowered slug. World Circuit is a Formula One driving simulation and easily the most advanced driving game yet produced. You can drive the complete international circuit of races, with each course painstakingly re-created, and you can adjust your gearing ratios and tire type for various race and weather conditions. World Circuit even allows you to control the frame rate of the animation behind the wheel.

MicroProse  
(410) 771-0440  
\$59.95

### X-Wing

Fly the same type of star fighter that Luke Skywalker flew to save the rebellion. This game is more of an advanced space-flight simulator than an action game, allowing you to tweak and adjust power configurations for maximum speed, protection, or firepower. All of the familiar sounds from *Star Wars*, from the plasma burp of the X-wing cannons to the banshee wail of a passing TIE fighter, truly throw you into the fiction of the game.

LucasArts  
(800) STAR-WAR  
\$69.95

Arriving soon...

# TOWER!

Tower cab simulator.

Photo-realistic graphics and features like a 360° scrollable view and easy access information displays put you right in the middle of all of the action.



Tower puts you in the controller's chair high atop the tower cab of a major airport to choreograph the movement of the incoming and outgoing air traffic.

You control runway activity, ground crews and terminal traffic through a 360° scrollable out-the-window view with your keyboard or mouse. Local radar displays and easy-access information displays give you crash reports, news stories and more. You can also link, via modem, with Microsoft's® Flight Simulator® and Mallard's Air Traffic Controller™.

Character-style game play allows you to work your way up the 'corporate ladder' of each airport gaining perks, acquiring passwords to new levels and getting promoted accordingly. Points are scored depending on varying levels of traffic at different airports, types of pilots, time of day, weather conditions and the problems and emergencies that face the controller on the job every day.

So if you think you're up to the challenge of directing traffic of a 'big league' international airport, get to your local software retailer for the arrival of **Tower!** From the publisher of today's hottest flight simulation enhancement products, Mallard Software. Who else?



Mallard™

See your software retailer or, for ordering information, call

1-800-WEB-FEET

© 1993 Mallard Software, Inc.  
© 1993 Aviation Simulations, Inc.

Circle Reader Service 101-145 [www.commodore.ca](http://www.commodore.ca)

to build a solid game platform. First on the list is Microsoft's DOS 6. This recent update of the ubiquitous operating system implements two features essential for serious gaming: memory management and the ability to set up single CONFIG.SYS and AUTOEXEC.BAT files to handle multiple configurations. Today's top game software products are notorious memory hogs, and they need as much conventional memory (below 640K) as possible. DOS 6's MemMaker utility will optimize your startup files and give you the most memory possible. Also, many games require you to create a boot disk to provide enough memory for the game to run. DOS 6's ability to create multiple configurations, selectable by a menu at startup, is a true PC godsend. You may configure a default work setup, a game setup that uses EMS and one that doesn't, and so on.

If you're a power user who wants to play with the monster games, then MemMaker probably won't free enough memory. You'll need Quarterdeck's QEMM 7 memory manager utility, which not only will free up more than enough memory but will even optimize parts of your multiply configured system.

## Finishing Touches

While the system I've been describing would make a great business system (yes, a game computer can also double as a true power user's workaday system), it's missing some of the essential components needed to transform it into an engine capable of simulating anything from jet flight to medieval sword combat. Without these finishing touches, your game machine will leave you cold.

Foremost of the trimmings are a sound card and a pair of quality speakers. For sound, consider a 16-bit card which features full Sound Blaster compatibility (still the standard for digitized effects and samples). Your best bets are either of the two 16-bit Sound Blaster cards or Media Vision's Pro AudioSpectrum 16-bit card. If you want even better sound, consider purchasing a Roland LAPC-1 or SCC-1 sound module to work in conjunction with your sound card. The result is unbelievable sound quality.

To get the most out of your sound system, you'll need self-powered speakers. Several companies now offer three-speaker systems (a sub-woofer and two satellite speakers) specially designed for PC use, and Roland manufactures the MA-12 speaker system, which will put more punch on your desktop than is heard in most home

## Tips

- If you're going to set up your system with a hard disk compression program, be sure to leave a healthy allotment of uncompressed megabytes for gameplay. Many games don't take kindly to compression utilities.
- With DOS 6's multiple configuration option and the ability to create menus in your startup files, you can create a layered menu system to access your library of games, thus bypassing DOS's somewhat cryptic commands.
- If you're putting together your system a piece at a time, pay close attention to the IRQs and DMA specifications of CD-ROM controllers, game cards, and sound cards. Write the information on an index card and tape the card to the side of your monitor, since some installation programs require you to provide that information as part of the installation process.
- If you're a true game junkie, consider adding a removable hard drive to your ultimate system. You can back up your game directories on the disk and easily copy them back to your hard drive if you ever need to reinstall them.
- Buy the best joystick you can afford; a cheap one is just that—cheap. If you can, try several out before you buy. Life is too short to play with inferior equipment.
- Purchase a small light for your desk. Playing games by the monitor's light is great for effect, but fumbling for copy protection keywords or a certain key on the keyboard requires just a touch more illumination.
- Consider purchasing a joystick platform, either for your desk chair or desktop. Control will be much more ergonomic, and hence your gaming will be more fun.
- Also consider a truly comfortable chair (you don't want to feel like you're at the office, do you?). I use a canvas sling lawn chair; it may look odd, but it feels just right.

audio systems. Another good source of powered speakers is your local music shop. There, ask for help with self-powered studio monitors.

Finally, your system will need some form of input device other than your keyboard. Most systems now include a mouse, which is good for menu

selection but not for serious gameplay. You'll need a joystick for that. If you're running a high-powered 80486 system, you'll be best served by a dedicated joystick controller card, such as the ones offered by CH Products or Thrustmaster. While many systems, as well as many sound cards, are supplied with integrated game ports, the ports are just not fast enough for smooth control on a speedy PC system.

For a basic joystick, none is better than the CH Flightstick. The quality and control will make you glad you spent the few extra dollars. For more advanced control options, especially if you enjoy flight or space simulators, you can choose from a wide array of options, such as the CH Flightstick Pro. CH Products also offers the Virtual Pilot, a smooth, hefty flight yoke (such as those found in Cessnas and other private planes) with a throttle control. The yoke is also excellent for driving games, but it's a little slow for fast-paced games such as X-Wing or the Wing Commander games.

Thrustmaster offers a complete system centered on its new Mark II weapons control system. The Mark II is a throttle control built for the left hand; it features seven customizable buttons. It's essentially a self-contained computer; you can write simple programs to completely configure the joystick/throttle system to the specific game you're playing. Thrustmaster also offers a flight control system in a military-style joystick featuring four buttons and a coolie hat at the top, enabling a flight sim jock to change the view with a simple flip of the thumb. For the ultimate in realism, you can get one of the company's rudder pedals for foot control of an airplane's rudder, enabling you to make such moves as supertight turns, slips, and precise targeting.

The ultimate game system is more than just a cutting-edge game machine; it's also an extremely powerful utilitarian computer, one which will give you years of use for under \$3,000. Shop carefully, and if you're purchasing components separately, check with the manufacturers to assure compatibility.

A solid, high-performance PC system is the cornerstone of the exciting hobby of PC game playing, and it's a hobby that offers escape, excitement, challenge, and nearly endless variety. If you want to have serious fun, you need to have a serious system. Budget for these minimum ultimate game machine system requirements, and your personal computer will have the power to entertain. □



SCENERY FOR  
MICROSOFT® FLIGHT SIMULATOR® v.5.0  
FOR DOS SYSTEMS

PHOTO-REALISTIC  
SCENERY OF SAN FRANCISCO BAY  
AND SURROUNDING AREA

For more information or to order call  
**1-800-WEB-FEET**

© 1993 Mallard Software, Inc.

Circle Reader Service Number 199

Mallard

 [www.commodore.ca](http://www.commodore.ca)



## 900 MHz breakthrough!

## New technology launches wireless speaker revolution...

Recoton develops breakthrough technology which transmits stereo sound through walls, ceilings and floors up to 150 feet.

By Charles Anton

If you had to name just one new product "the most innovative of the year," what would you choose? Well, at the recent *International Consumer Electronics Show*, critics gave Recoton's new wireless stereo speaker system the *Design and Engineering Award* for being the "most innovative and outstanding new product."

Recoton was able to introduce this whole new generation of powerful wireless speakers due to the advent of 900 MHz technology. This newly approved breakthrough enables Recoton's wireless speakers to rival the sound of expensive wired speakers.

#### Recently approved technology.

In June of 1989, the *Federal Communications Commission* allocated a band of radio frequencies stretching from 902 to 928 MHz for wireless, in-home product applications. Recoton, one

of the world's leading wireless speaker manufacturers, took advantage of the FCC ruling by creating and introducing a new speaker system that utilizes the recently approved frequency band to transmit clearer, stronger stereo signals throughout your home.

#### 150 foot range through walls!

Recoton gives you the freedom to listen to music wherever you want. Your music is no longer limited to the room your stereo is in. With the wireless headphones you can listen to your TV, stereo or CD player while you move freely between rooms, exercise or do other activities. And unlike infrared headphones, you don't have to be in a line-of-sight with the transmitter, giving you a full 150 foot range.

The headphones and speakers have their own built-in receiver, so no wires are needed between you and your stereo. One transmitter operates an unlimited number of speakers and headphones.



Recoton's transmitter sends music through walls to wireless speakers over a 75,000 square foot area.

**Crisp sound throughout your home.** Just imagine being able to listen to your stereo, TV, VCR or CD player in any room of your home without having to run miles of speaker wire. Plus, you'll never have to worry about range because the new 900 MHz technology allows

stereo signals to travel over distances of 150 feet or more through walls, ceilings and floors without losing sound quality.

**One transmitter, unlimited receivers.** The powerful transmitter plugs into a headphone, audio-out or tape-out jack on your stereo or TV component, transmitting music wirelessly to your speakers or headphones. The speakers plug into an outlet. The one transmitter can broadcast to an unlimited number of stereo speakers and headphones. And since each speaker contains its own built in receiver/amplifier, there are no wires running from the stereo to the speakers.

#### Full dynamic range.

The speaker, mounted in a bookshelf-sized acoustically constructed cabinet, provides a two-way bass reflex design for individual bass boost control. Full dynamic range is achieved by the use of a 2" tweeter and 4" woofer. Plus, automatic digital lock-in



Breakthrough wireless speaker design blankets your home with music.

tuning guarantees optimum reception and eliminates drift. The new technology provides static-free, interference-free sound in virtually any environment. These speakers are also self-amplified; they can't be blown out no matter what your stereo's wattage.

**Stereo or hi-fi, you decide.** These speakers have the option of either stereo or hi-fi sound. You can use two speakers, one set on right channel and the other on left, for full stereo separation. Or, if you just want an extra speaker in another room, set it on mono and listen to both channels on one speaker. Mono combines both left and right channels for hi-fi sound. This option lets you put a pair of speakers in the den and get full stereo separation or put one speaker in the kitchen and get complete hi-fi sound.



These wireless stereo headphones have a built-in receiver.

**Factory direct savings.** Because of our commitment to quality and our factory direct pricing, we sell more wireless speakers than anyone! For this reason, you can get these speakers far below retail with our 90 day "Dare to Compare" money-back guarantee and full manufacturer's warranty. Through this limited time offer, the Recoton transmitter is only \$69. It will operate an unlimited number of wireless speakers priced at only \$89 and wireless headphones at \$59 each. So take advantage of this special offer to fill your home with music. Your order will be processed in 72 hours.

**Recoton Transmitter.....\$69** \$4 S&H

Wireless products compatible with the Recoton transmitter:

**Recoton Wireless Speaker.....\$89** \$6 S&H

**Recoton Wireless Headphones.....\$59** \$4 S&H

Please mention promotional code 161-CU1113.

For fastest service call toll-free 24 hours a day

**800-992-2966**



To order by mail send check or money order for the total amount including S&H (VA residents add 4.5% sales tax). Or charge it to your credit card by enclosing your account number and exp. date. Send to:

**CONTRAD INDUSTRIES**

2820 Waterford Lake Drive Suite 106  
Midlothian, Virginia 23113  
www.conradind.com

#### AWARD WINNING WIRELESS SPEAKER

Built-in receiver and amplifier:

The wireless speaker and headphones both contain a built-in receiver and amplifier. Signals are picked up and transmitted as far as 150 feet away through walls without the use of wires.



Volume Power Tuning Tuned ports  
2" tweeter  
4" woofer  
Individual left, right & mono switch and Individual bass boost control (on back)  
Size: 9"H x 6"W x 5.5"L  
Signal-to-noise ratio: 60 dB  
Channel Separation: 30 dB  
Two-way bass reflex design  
10 watts/channel RMS amps  
Frequency Response: 50 Hz-15 KHz

**Don't take our word for it.** Try it yourself. We're so sure you'll love the new award-winning Recoton wireless speaker system that we offer you the **Dare to Compare Speaker Challenge**. Compare Recoton's rich sound quality to that of any \$200 wired speaker. If you're not completely convinced that these wireless speakers offer the same outstanding sound quality as wired speakers, simply return them within 90 days for a full "No Questions Asked" refund.

Recoton's Design and Engineering Award





## TECHNOLOGY UPDATE



# How to get surround sound without buying the theater...

An amazing new surround sound decoder turns your existing stereo system into a multi-channel home theater.

By Charles Anton

As much as I love renting videos, it's just not the same as seeing a movie in a theater. I remember the first time I saw *Top Gun*. I nearly jumped out of my seat when the planes flew overhead. One of the reasons movies seem so real is because surround sound makes it seem like you're actually there. Now there's an incredible new device that lets you use a stereo receiver to get that same surround sound in your home.

It takes more than just four speakers to get surround sound; there needs to be some way of separating the signals. The new Chase Technologies HTS-1 decoder does just that, and in a revolutionary way that rivals the best Dolby Pro-Logic and THX systems available.

**Wins over critics.** Gary Reber, editor and publisher of the most authoritative magazine on home theater systems, *Wide-screen Review*, stated, "...passive matrix decoders such as the new Chase HTS-1 work great as Dolby Surround™ extractors, and sound exceptionally natural when used for motion picture soundtracks and music."

**Passive circuit.** In 1972, legendary audio pioneer David Hafler invented a passive circuit to extract the "L minus R" difference signals in

stereo soundtracks. Because the circuit was patented, it was only available on expensive Hafler products. Now that the patent has expired, Chase can make this amazing decoding system available at a fraction of the cost!

**Breakthrough technology.** The HTS-1 is able to decode the Dolby Surround™ signal in a videotape or laserdisc because the spatial and depth cues have been matrixed into the "L minus R" portion of the two-channel stereo soundtrack.

By decoding passively, the HTS-1 avoids costly and noisy signal processing. Plus you don't need any additional amps! Just connect the HTS-1 to your existing stereo system, add two speakers for the rear, and you'll experience the magic of home theater at a fraction of the cost of other systems.

**Concert sound.** The HTS-1 also decodes the ambience found in all music recordings. This sense of space, or "concert hall acoustics," is present in all CDs and cassettes, especially live recordings. John Sunier, the leading authority on surround sound and producer of *Audiophile Audition*, a nationally syndicated radio program for audio enthusiasts, says, "...the new Chase HTS-1, when used



Surround sound/home theater has become the rage of the 90's because it adds depth and realism to stereo sound, giving you the home theater experience. It makes you feel like you're actually at a concert or movie theater. To "fill a room" with surround sound, you need more than two channels. That's the beauty of the HTS-1; it provides four channels of sound from any two-channel stereo source.

**Free center channel.** By connecting your VCR or laserdisc player to your TV, you get sound from your TV speaker; this acts as the fifth or "center channel." Adjusting your TV's volume gives you as much or as little "center channel" localization as you desire, without extra speakers or amps. There are also no extra costs with the "fifth" channel. When used with the HTS-1, you'll have a true state-of-the-art five-channel system.

**Passive.** The HTS-1 is passive, meaning it requires no AC current. It actually sounds better than active decoders, producing more clarity, more detail, no noise, a greater sense of space and zero distortion. This superior system is a breakthrough unique to Chase.

**Active.** All Dolby Pro-Logic decoders (even the built-in units) are active, meaning they decode and amplify the signal electronically. This can induce noise and distortion, hindering the home theater experience. This is an example where "more is less." Spending thousands of dollars on an active system will not give you the performance of the HTS-1 decoder. Try it for yourself.

to decode the hidden ambience in all musical recordings, definitely outperforms all the Dolby and THX processors which could cost you up to \$3,000... I am impressed!"



The HTS-1 decoder makes your movies come to life, bringing the theater experience home.

**Easy installation.** Hooking up the HTS-1 is easy. Simply connect the speaker outputs of your receiver or amp to the HTS-1, then connect speaker wire to the front and rear speakers. The rear channel speakers don't have to be big. In fact, we recommend the Chase ELF-1 in either black or white finish to match your decor. They can be mounted with enclosed color-matched mounting brackets or can be flush mounted on the wall. They are also water and weather-proof, so they can be used indoors or out.



The ELF-1 rear channel speakers integrate perfectly with the HTS-1.

## Risk-free home trial.

Let's face it—the best way to evaluate surround sound is in your home, not in a showroom. That's why we're offering this risk-free home trial. We're so sure you'll be delighted with the quality of these products and the surround sound experience that we are giving you 30 days to try them for yourself. If they're not everything we say, return them for a complete "No Questions Asked" refund.

**HTS-1 Home Theater Decoder**..... \$79 \$6 S&H  
Speakers designed by Chase for the HTS-1:

**ELF-1 Rear Channel Speakers** .....\$99 pr \$6 S&H  
Please mention promotional code 113-CU1112.

For fastest service call toll-free 24 hours a day

**800-992-2966**



To order by mail, send check or money order for the total amount including S&H (VA residents add 4.5% sales tax.) Or charge it to your credit card, enclosing your account number and expiration date.

**CONTRAD INDUSTRIES**

2820 Waterford Lake Drive Suite 106

www.conradore.ca

## MICROSOFT PUBLISHER 2.0

A blank page can be an intimidating thing; it can stymie even an experienced designer. To reduce such design stress, Microsoft has introduced its second version of Publisher with a host of helpful features for the growing number of page-layout laypeople.

Publisher 2.0 includes 35 new standard templates and 17 new PageWizard smart templates that automatically make everything from business reports to paper airplanes. The program abounds in automation, with features such as automatic text-wrapping around pictures and shaded objects. The Table tool gives you a choice of 21 formats with which to create tables, and the Shape tool lets you draw 36 different shapes, which you can manipulate in size and proportion to exactly fit your designs.

Even some of Publisher's help features are automatic. First-time help prompts you with help screens when you first use tools or features, and Print Troubleshooter tracks each print job and suggests problem remedies. Publisher is by far the most "helpful" program I've seen, offering eight variations of online assistance.

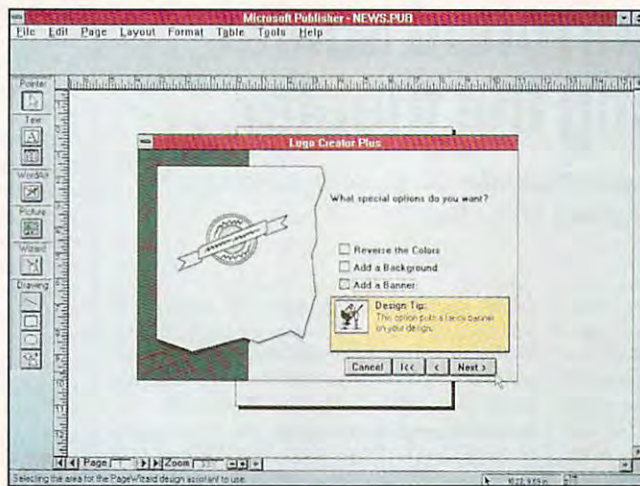
The program comes with 20 TrueType display fonts and more clip art and decorative borders than I care to count. All of this convenience is nice, but it promotes an if-I-can-do-it-I-should-use-it mentality. Microsoft realizes the potential for clutter and advocates restraint in the user's guide.

If the PageWizard templates could eliminate excessive design, they would be

truly magical. But Publisher does the next best thing by starting you off with professional designs, including instructions and tips for tailoring the publication to your needs. Normally, design should follow content (form follows function), but you can get good results with

run multiple copies of Publisher, however, which is almost as good.

Lining up objects accurately in Publisher can be difficult because you see only their outlines when you pick them up. This is fine for simple shapes, but text and pictures often need to be



Microsoft Publisher 2.0 includes a set of improved PageWizards which can automate the creation of documents.

these templates as long as you realize that you can't simply dump your text and pictures in and get automatic quality.

Much of the power of Publisher is hidden behind its easy-to-use interface. The program offers many features that high-end applications such as PageMaker have only recently included, such as drag-and-drop text editing, object embedding and linking, grouping and ungrouping capability, and incremental nudging of elements. Irregular-shape text-wrapping and the Shape tool are features PageMaker 5.0 doesn't even offer.

Yet, Publisher does have its limitations. It can't open more than one document at a time, which seems odd for such an otherwise powerful Windows program. You can

aligned by details within their frames. Judging alignment by their outlines is difficult guesswork.

You can rotate text in WordArt 2.0, an OLE program that's included with Publisher. Pictures must be rotated in other applications, such as Microsoft Draw, another OLE program. Publisher itself can only rotate line objects made with its drawing tools. WordArt can handle most of your text rotation, since it now supports TrueType fonts. But the smallest text that it can use is 12 points, so you can't place photo credits or other small text vertically.

Although Publisher can display and print 24-bit images (with proper hardware), its palette for line and fill characteristics is limited to 16 uneditable colors. High-

quality color output is possible in spite of Publisher's limited color, but if you need specific spot colors or do four-color publishing on a regular basis, you might be better served by a high-end program with full-color capability. If you don't need color or if your final output will come from a color inkjet or laser printer, the program's range of hues may be adequate. How often you use color, to what degree, and who does your printing should all be criteria in considering Publisher versus other programs.

Publisher works well as a design-for-dummies publishing program, but it would be a mistake to discount it as strictly an amateur's application. It's quite capable of producing professional results, with or without using autopilot. Just be sure that when you switch to manual, you don't overdo it.

PHILLIP MORGAN

Microsoft  
(800) 426-9400  
\$199

Circle Reader Service Number 434

## BALLPOINT MOUSE 2.0

Notebook computers are amazing. It's hard to believe that you can cram a 486 motherboard with 16MB of memory and a 200MB hard disk into such a tiny package. In fact, notebook designers have been able to miniaturize everything except the person using the computer. It's the user interface that presents the biggest challenges in these tiny PCs.

The screen, keyboard, and pointing device on notebooks all must be large enough to be usable but small enough to be port-

**From Those  
Wonderful Folks  
Who Gave You  
Gridlock, Blackouts  
and Runaway Taxes,  
Comes Raw Sewage,  
Yellow Journalism  
and the Subway  
at 3 a.m.**

ble. Screens have made great strides in the last few years; keyboards haven't improved much and probably won't. Pointing devices are where the current action is, and with Windows running on nearly 60 percent of all notebooks, a good, solid pointing device is a must.

Most people would agree that, for a notebook computer, the trackball is the portable pointing device of choice. It comes closest to the mouse in terms of accuracy and control, and it occupies very little space.

Microsoft has just introduced its newest entry into the trackball fray: the Ballpoint Mouse 2.0. It's smaller and sleeker than its version 1.0 big brother, and the trackball itself is much improved. In fact, with its silky smooth action and skid control, it rivals desktop trackballs. It's easily the best trackball I've ever used.

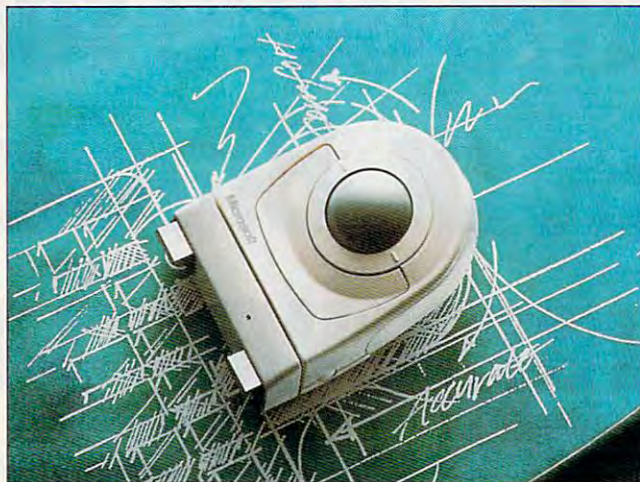
Right out of the box, you can tell the Ballpoint is different. Its new design fits your hand the way a pointing device should. The edges are smooth, and the underside sports a nonslip runner grip. The buttons are larger than they were with the 1.0 Ballpoint, and their position is different. Instead of the left and right buttons being on top of each other on one side of the mouse, the left button is on the far side and the right button is on top. There's a third button opposite the left button that becomes the main button for southpaws. (It can be reconfigured as the right button if you prefer.)

Like most other laptop trackballs, this device clips on the side of your notebook. It has small hangers that will fit most notebooks and allow you to close the case with it attached. The

Ballpoint uses a PS/2 connector, and there's also a QuickPort version that simply snaps into any QuickPort-equipped computer. No serial-port version is available, however.

The Ballpoint also comes with a new release of the Microsoft Mouse Driver, ver-

key to move the pointer to the middle of the screen. Although Screen Wrap seems more like something you'd want to use as a practical joke, the other features are all useful, especially on a notebook. It's worth noting that you can use this version of the driver with your



*Microsoft's new Ballpoint Mouse 2.0 sports larger, more conveniently placed buttons and includes an improved driver.*

sion 9.01. With this new driver, you can not only adjust the buttons, as discussed above, but also control the size of the cursor; add mouse trails; make the pointer grow when you move the mouse; and adjust what Microsoft calls color, which in this case means choosing black, white, or reversed for the mouse pointer.

In addition to these features there are some other interesting options in the new driver. With Magnify, you can use a hot key to enlarge the area under the mouse pointer. With Snap-To, the mouse pointer automatically moves to the default button in a dialog box. Set Screen Wrap to on, and the pointer will move off one edge of your display and appear at the beginning of the opposite edge. Locate uses a hot

mouse, too, if you want to take advantage of the latest enhancements.

Many notebooks these days come standard with pointing devices, but if yours doesn't, this well-designed, smooth, and sure-footed trackball may be your best pointer bet.

CLIFTON KARNES

Microsoft  
(206) 882-8080  
\$125

Circle Reader Service Number 435

## DISCOVER SPACE

The heavens have been an endless source of fascination throughout human history. But the hard science that underlies our understanding of the cosmos is often daunting. Many of the concepts of astronomy are

more easily understood if learned visually—a task for which computers are perfectly suited. Brøderbund's Discover Space lets your computer show you the sun, moon, planets, and stars, as well as the ships we've used to explore them. Its text and many pictures, illustrations, and animations put astronomical concepts into context and explain them with abundant use of comparison and analogy.

But what sets Discover Space apart from so many educational programs is its usefulness even after you've seen all its images and animations. The program's Skyline feature can plot 7000 stars, 110 deep space objects, 90 constellations, and the nine planets, all positioned as they would be seen from any point on earth. Not only that, but the plot can be made at any time, on any day in the past, present, or future. Discover Space can animate the stars to show how they appear to travel across the heavens and print a time- and location-specific star map, so you'll know exactly where to find what you're looking for in the night sky.

Discover Space can also show you the phase of the moon for virtually any date, trace the path of 33 past and future solar eclipses, and calculate the damage caused by an asteroid striking the Earth. You determine the asteroid's size and velocity, and the program will superimpose the resulting crater over one of several U.S. sites to give you an idea of the destruction such a catastrophe would cause.

You can run Discover Space in VGA or 256-color SVGA mode, but the latter requires a VESA driver. Running in SVGA not only gives

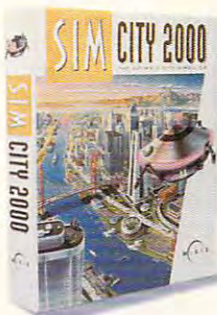


# Now Entering SimCity 2000™



*More SimCity flavor—less salt. The desalination plant pumps fresh water into pipes you lay in the new underground level.*

lies a seething cauldron of angry taxpayers, broken water mains and other challenges that will take you uptown, downtown, even underground. Now entering SimCity 2000—the ultimate city simulator.



Beneath the polished facade

This long-awaited follow-up to our software landmark, SimCity® makes simulated real estate, in a word,

realer. In it, you get multiple viewing angles. You get to import your old SimCities. You

get to terraform your landscape. You get total control of a subterranean web of water pipes and subways. And you get it all in gripping, eye-imploding 3-D.

So pack up those old programs and move to SimCity 2000. Everything that started the SimCity revolution. In a vivid new evolution.



*Stop the presses! 2000 comes complete with a daily paper that may have you wanting to repeal the first amendment.*



*Take a byte out of crime. Build SimPrisons—along with SimHospitals, SimSchools and other city SimServices.*

## The Ultimate City Simulator.



Available for IBM PC & compatibles and Macintosh. © 1993 Sim-Business. All rights reserved. SimCity 2000 is a trademark of Sim-Business. Maxis and SimCity are registered trademarks of Sim-Business. For product or ordering information, contact your local retailer or call 1-800-33-MAXIS.

Circle Reader Service Number 158

[www.commodore.ca](http://www.commodore.ca)

better color representation but also allows for more and better animation. Although some animations were noticeably faster on a 486, Discover Space ran well on a 33-MHz 386DX machine with 4MB of memory. Running in SVGA slowed operation slightly, but the loss of speed was well worth the gain in image quality.

While sound isn't essential, the program supports several popular sound cards, and the music and background noises make it considerably more impressive. Viewing skylines in SVGA mode with outdoor sounds is almost like looking out an open window.

Neither the program's operation nor its content is difficult to grasp, yet it's by no means just a children's program. Whether you're interested in astronomy, space travel, or science fiction or just like looking at the stars, Discover Space offers an abundance of stellar information and entertainment.

PHILLIP MORGAN

Broderbund Software  
(800) 521-6263  
(415) 382-4400  
\$50-\$60 suggested price range  
Circle Reader Service Number 436

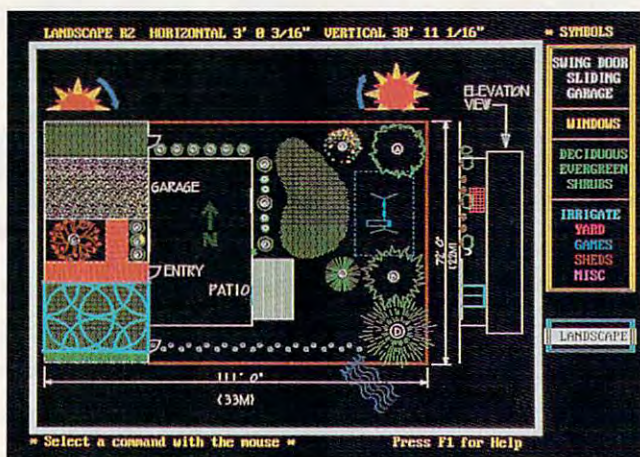
## THE HOME SERIES, RELEASE 2

T-squares and architect's scales begone! Autodesk's The Home Series, Release 2, lets you create architectural drawings on your home computer, view them in 3-D, and quickly and easily make as many changes as you like.

The series consists of four programs: Home, Kitchen & Bath, Deck, and Landscape. They're stripped-down versions of Autodesk's Generic CADD 6.0



Broderbund's Discover Space uses animation and SVGA graphics to teach about astronomy and the planets.



Autodesk's Home Series lets you design or modify elements of your home using specialized CADD programs.

and use built-in macros to eliminate much of the full program's complexity. The programs use the same basic interface, but each includes special commands and symbols. Kitchen & Bath, for example, has a much wider variety of cabinet and appliance symbols than does Home.

The programs also differ in how their output can be used. Deck is probably the most useful for true do-it-yourselfers who intend to handle everything from designing to

building. While all of the programs render very accurate plan and elevation drawings, Deck produces more detailed drawings and allows you to selectively view and print their layers. The other three programs seem best suited for drawing basic spatial plans, which professionals can import directly into their high-end CADD (Computer Aided Drafting and Design) applications and use to develop complete sets of drawings and specifications.

Even as only initial planning tools, The Home Series programs can be tremendously useful. They scale your drawings for you, so miscalculations won't throw off your plans (unless, of course, you use incorrect measurements). The many symbols included in the series are automatically scaled to your drawings when you place them. It's much easier to get a sense of proportion if you can look at a drawing of a house full of furniture and fixtures or a kitchen complete with cabinets and appliances.

The Home Series won't make you an architect. A basic knowledge of home design and familiarity with architectural drafting is necessary. The programs' documentation repeatedly warns that you need to consult architects, builders, and inspectors to be sure your designs are safe, workable, and up to local building codes. Nevertheless, Autodesk tries to give you enough basic information to get started.

The manuals list common building materials and standard dimensions and offer advice on functionality and aesthetics. Landscape's instructions discuss balance, order, unity, proportion, variety, and seclusion as considerations in creating your backyard environment.

If you have much drafting experience, you'll notice that the programs don't strictly follow architectural conventions. If, for example, you're using interior measurements in your drawing but your architect or builder assumes you've specified conventional exterior dimensions accounting for wall thickness, you could have some serious problems.

The best reason for using

# Bring Home The Magic Of Children's Musical Theatre™ With Dr. T's Sing-A-Long!

**Ages 3 to 10**



"Click" to repeat songs and turn lyrics on and off.

Large, Colorful Buttons give the smallest hands big control over the music.

Lyrics & Notes scroll to the music.

Dancing Icon helps the singer follow along and read the words and music!

Brilliant Animation brings each song to life!

"Actors" talk to the audience.



## Dr. T's Sing-A-Long Is Musical Software That Puts Your Child In The Middle Of The Music... The Lyrics...The Animation...The Fun!

The songs and lyrics are directed right at the computer while your child sings along to over 25 Classic Children's songs. Each one is an engaging story with its own actors and animation.

*Itsy Bitsy Spider, Old MacDonald, Yankee Doodle, Mary and her Little Lamb,* and all the other characters provide hours of entertainment while involving your child with basic learning skills.

Parents and educators agree — Dr. T's Sing-A-Long is the innovative way to teach reading words and music. Lyrics scroll in time with the music so learning is fun. You can print the music and lyrics on virtually any printer.

Dr. T's Sing-A-Long grows with your child. Start your small one in *Little Kids Mode*. The simplified interface develops singing, reading, and mouse skills, while it protects Windows from a child's curiosity. As abilities progress, use *Normal Mode*.



### Included

Simple instructions for adding a microphone to record performances. Any grandparent would treasure a recording! Software supports all popular sound cards and CD ROM drives.

Full-color Dr. T's Sing-A-Long Song Book. The songs, with words and sheet music, are beautifully illustrated with animated screen characters.

**Dr. T's Sing-A-Long**  
Make It Your Child's First Software...  
It's Never Too Early To Sing!

**Call 1-800-282-1366**

For fastest ordering. Or Fax 1-716-873-0906

**Make Your Child A "Star" This Holiday Season! Only \$29.95**

Free Delivery Included

Requirements: Windows 3.1 • IBM 386 or compatible computer • CD-ROM drive or 3.5" floppy drive • VGA display • 4 MB of RAM and 2 MB free hard disk drive • Sound card.

**YES!** Please send me Dr. T's Sing-A-Long.  3.5" disk  CD ROM disk

Name (please print clearly)

Address

City

State

Zip

VISA

MasterCard

American Express

Credit Card Number

Expiration Date

Phone Number

Signature

Or make check payable in US Funds and mail to: Dr. T's Music Software

P.O. Box 119, Buffalo, NY 14207

Dr. T's Music Software, Inc. All Rights Reserved.

NY, MA, CA residents: Please add applicable sales tax.

The Home Series is to get an accurate spatial impression of your new or remodeled home or yard. If you can't get that from the programs' two-dimensional plan views, you can render them as 3-D eye-level or over-view drawings. By changing your point of view, you can "enter" any room or area you like using the 3-D Plan module. It's possible to move around the room using the eye-level view, but 3-D Plan is a memory- and processor-intensive subprogram and may run quite slowly on some systems. You may also have to play with your configuration and eliminate some TSRs to get it to run properly.

CADD experience isn't necessary to effectively use The Home Series. In fact, if you've worked with full-blown CADD programs, you'll probably be frustrated by limitations built into these four programs for the sake of easy use. Still, you should plan to spend some time with the manuals; their tutorials are quite helpful. It'll probably take you longer than Autodesk's estimated 30 minutes to figure out a Home Series program, but once you do, it won't take half that long to decide you never want to go back to the drawing board.

PHILLIP MORGAN

Autodesk  
(800) 228-3601 (U.S. and Canada)  
(206) 487-2233  
\$69.95 each

Circle Reader Service Number 437

## OMNICD

Why are CD-ROM discs so great? They hold tons of data. Why are they so bad? They're s...l...o...w. And I mean *really* slow. The average CD-ROM drive has an access time of 350 ms

while the average IDE hard disk has an access time of about 15 ms. When it comes to throughput, the average CD-ROM drive moves data at about 150K per second, while most modern hard disks pump info at 1MB or more per second.

How do you make a CD-

comes with its own dedicated interface card. It's worth mentioning that Creative Lab's CD uses a proprietary interface rather than the industry-standard SCSI.

There are several goodies packaged with the OmniCD. First, the drive is Photo CD compatible. Included

for about a month, I can't find a single thing to complain about. In fact, the only negative is that it doesn't use a SCSI interface. But even that's something of a virtue, because its proprietary interface makes it compatible with the zillions of Sound Blaster Pro and ASP cards already out there. At \$299, this is a deal that's hard to beat.

CLIFTON KARNES

Creative Labs  
(408) 428-6600  
\$299

Circle Reader Service Number 438



The Creative Labs OmniCD double-speed CD-ROM drive is available in a variety of bundles, including one with PhotoStyler.

ROM drive faster? The best way is to double its speed, and that's just what Creative Labs has done with the OmniCD. Instead of moving data at the 150K rate of single-speed drives, it double-times data at 300K per second. The OmniCD isn't the only double-speed drive available, but it's one of the least expensive. And it's completely compatible with The Multimedia PC Marketing Council's recently released Level 2 Specification, which calls for a 16-bit sound card and a double-speed drive.

Installing the OmniCD is painless. If you have a Sound Blaster Pro or ASP 16, the CD interface is already built into your sound card. So you just plug the drive's control and audio cables into the card, plug a power connector into the drive, and install the CD drivers, and you're in business.

If you have another brand of sound card or no sound card, the OmniCD

in the package is a special version of Aldus PhotoStyler, one of the best bitmap graphics editors around. You'll also find several utilities, including CD Player, which makes playing audio CDs easy.

After installing the OmniCD, the first thing you're likely to notice is that it doesn't use a standard CD caddy. Caddies are a pain, and I'm glad that the OmniCD and several other second-generation CD drives are opting for the caddyless design.

"All this is great," I hear you say, "but how fast is it?" Well, as you'd expect, it's about twice as fast as a regular drive but feels even faster. The difference between using the OmniCD and a single-speed drive is dramatic. With the OmniCD, images snap onto the screen, full-motion video sequences are suddenly fluid, and searches are quicker. Everything is easier and more enjoyable.

After using the OmniCD

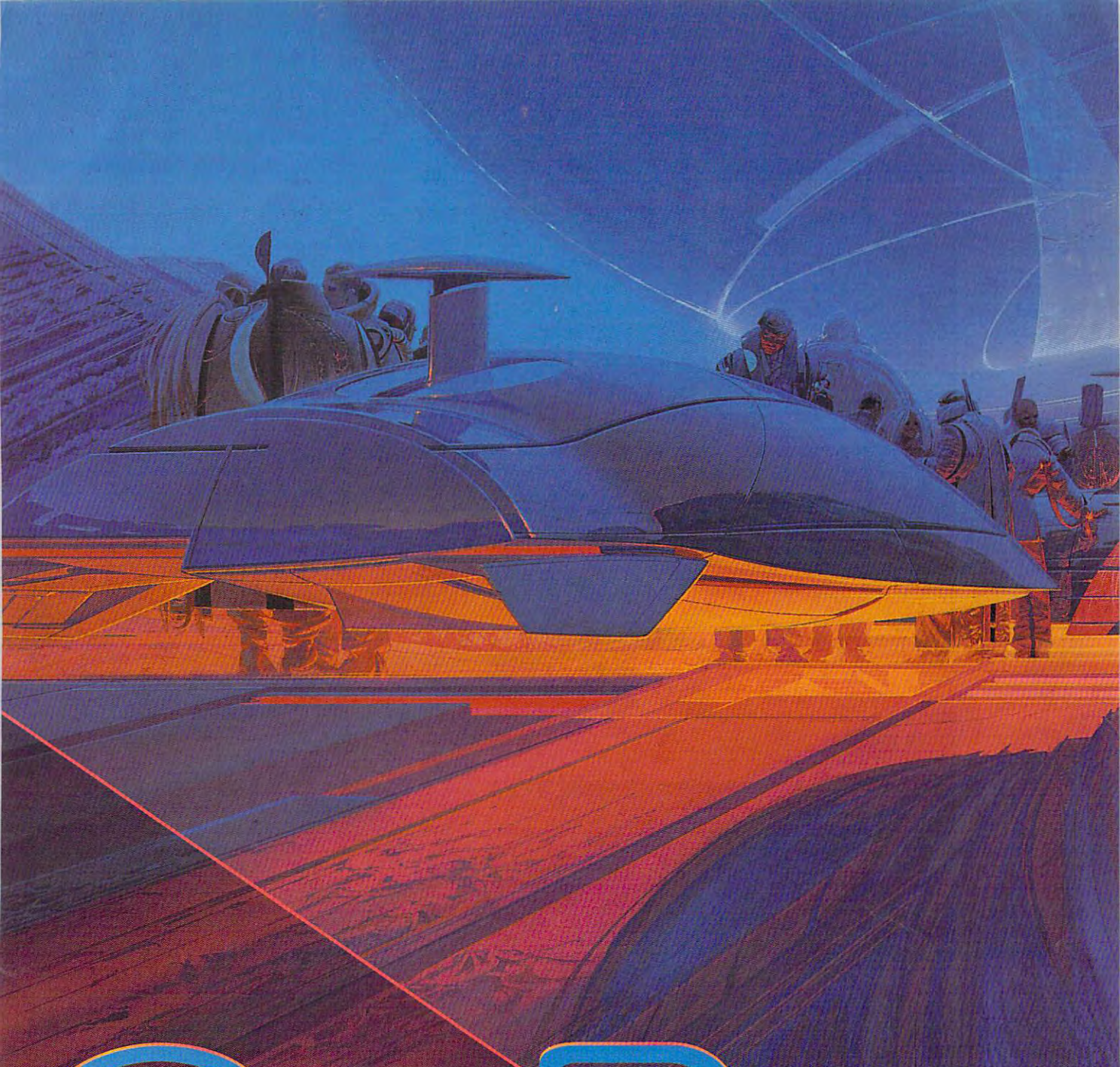
## THE LOST VIKINGS

Arcade fans suffering from game-console envy can finally find relief in The Lost Vikings, a superb platform-style action game that survives the voyage to the PC completely intact.

You control a trio of bickering Viking warriors, displaced in time and space by an evil alien zookeeper. Your goal is to guide them home, through 37 levels of increasingly weird worlds, blocked by puzzles and deadly adversaries. Each Viking has his own unique ability to jump, attack, or defend. Because you can control only one Viking at a time, success requires switching between characters, combining their strengths to survive.

Gameplay, while not terribly original, is instantly engaging and constantly challenging. Background graphics are colorful and varied, highlighted by expressive character animation and huge multiscreen playfields. The trio's subtle comic interplay also adds delightful personality to the action. Controls are equally responsive for keyboard or joystick,





# CYBERRACE™

**CYBERDREAMS™**  
ENTERTAINMENT SOFTWARE  
Circle Reader Service Number 144

CYBERRACE - A REVOLUTIONARY 3D COMBAT AND RACING SIMULATION DESIGNED BY WORLD-FAMOUS FUTURIST SYD MEAD, WHOSE DESIGN CREDITS INCLUDE *BLADE RUNNER*, *TRON*, *2010*, AND *STAR TREK: THE MOTION PICTURE*.

Available for the IBM PC and Compatibles (August 1993), Commodore Amiga (March 1994) and Apple Macintosh (March 1994).  
For further information please contact: North America (818) 348-3711 • Europe (071) 328-3267 (U.K.)

Cyberdreams and CyberRace are trademarks of Cyberdreams, Inc. ©1993 Cyberdreams, Inc. Illustration ©1992 Oblagon, Inc. ALL RIGHTS RESERVED

WWW.WAY-TO-COMMODORE.CA

# 2 GREAT MEDICAL PROGRAMS

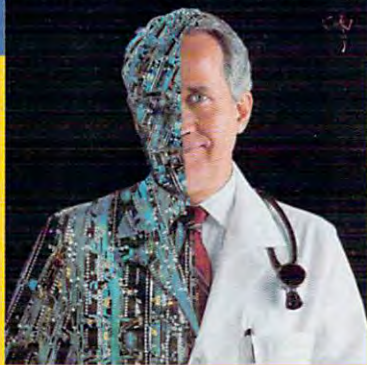
Created By Doctors NOT Computer Programmers!

"BEST" Adult Discovery Software  
COMPLETE CHOICE  
NOMINEE

Expert Medical Advice  
At The Touch Of A Key!



## HOME MEDICAL ADVISOR



## PIXEL PERFECT

Includes... *InterAct* The MOST Comprehensive Drug Interaction Program



## YOUR MEDICAL RECORDS

### Fast Answers

The ONLY program of its kind to analyze symptoms and provide actual diagnoses

### Easy To Understand

No confusing "medical jargon"

### The Largest Drug Database

Plus extensive info on diseases, injuries, tests, poisons, nutrition & diets

### Home Medical Advisor

\$87.50\*

### Your Medical Records

\$69.95\*

MS-DOS and Windows Versions Available

Your Choice \$49.95  
or  
Both For ONLY \$69.95  
\* List Price

1-800-788-2099

See your Software Dealer or... Call Us Today

\*All Trademarks are property of their respective owners

### 14 Complete Medical Histories

Keeps and prints YOUR important medical records in two different formats

### Medical-Legal Documents

Prints custom documents like the "Living Will" and "Durable Power of Attorney"

### Analyzes Over 2,400 Substances

InterAct, provides a complete analysis of 250,000 possible drug interactions

TEL (407) 777-5353 FAX (407) 777-0323  
10460 So. Tropical Trail Merritt Island, FL 32952

FREE SAME DAY SHIPPING!

Ask about our new CD ROM Pro version!



Circle Reader Service Number 207

## REVIEWS

with excellent support for the four-button Gravis PC Gamepad controller.

The best compliments paid to The Lost Vikings are that it looks as good and plays as well as the Amiga and SuperNintendo versions. That's high praise indeed and an encouraging sign for the future of arcade games on the PC.

SCOTT A. MAY

Interplay  
(800) 969-4263  
\$49.95

Circle Reader Service Number 439

## READY, AIM, FILE!

Ready, Aim, FILE! 2.5b is a Windows file and program manager that allows you to use 256-character filenames. With its system of file cabinets and folders, you can organize files by subject rather than by disk directory structure. You have



If you're looking for a Nintendo-esque platform game for your PC, Interplay's *The Lost Vikings* fits the bill.

six cabinets, and within each cabinet you may have as many folders as you wish, but you may view only three at a time.

RAF displays onscreen buttons for performing common operations you would otherwise do in Program Manager and File Manag-

er—launching programs, moving, copying, deleting, searching, and so forth. RAF can't actually replace Program Manager as a shell; instead, it runs on top of it.

While RAF allows 256-character filenames, it still must create its own DOS names

(like 307277.DOC). The manual warns against using DOS or Windows to change these filenames, since the program could get confused (and so could you). A smarter program would protect you from accidentally or illegally changing these filenames outside the program. If you use RAF at all, you probably should use it whenever you're using Windows.

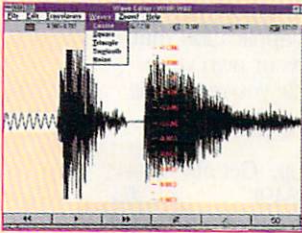
Within Windows applications, Open, Save As, and Import can use the long filenames. RAF is preset to intercept these commands with over a dozen programs. However, in my experience, Open didn't always work properly with Word for Windows, one of the preset programs. You must do some setup to make the intercept feature work with other Windows programs, and this isn't a task for novices.

RAF has some nice ideas, like Version Control (which lets you track changes in a file by saving without replacing). But it's rough

**10  
SUPER  
WINDOWS  
APPS**

**FREE\***

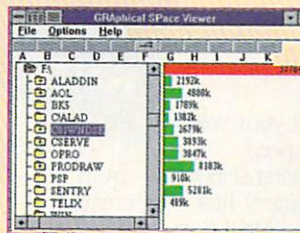
**ALL-NEW!  
COMPUTE'S ULTIMATE  
WINDOWS™ DISK**



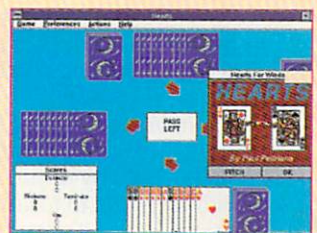
**WAV EDITOR**



**MAH JONGG**



**SPACE VIEWER**



**HEARTS**

**THIS ALL-NEW MUST-HAVE COLLECTION OF DYNAMITE WINDOWS  
UTILITIES AND GAMES LETS YOU**

- **CREATE AND EDIT ICONS**
- **EXIT WINDOWS IN A FLASH**
- **FIND DUPLICATE FILES FAST**
- **DISPLAY YOUR DISK'S SPACE USAGE**
- **WIN AT HEARTS**
- **MASTER MAH JONGG**
- **PREVIEW FONTS**
- **ADD GROUPS TO YOUR SYSTEM MENU**
- **EDIT WAV FILES**
- **SEE YOUR MODEM STATUS ONSCREEN**

All programs on this disk are the highest quality shareware and freeware and have been tested and virus-scanned by COMPUTE's editors. And for a limited time, the disk is yours free.\* Order now!

[ ] YES! Rush me my free\* COMPUTE's Ultimate Windows Disk.  
I pay only for postage and handling.

\_\_\_\_\_ 5 1/4" HD disk(s) \_\_\_\_\_ 3 1/2" HD disk(s)

\$ \_\_\_\_\_ Total disks x \$3.95 postage and handling each

\$ \_\_\_\_\_ Sales tax (Residents of NC and NY, please add appropriate sales tax for your area. Canadian orders, add 7% goods and services tax.)

\$ \_\_\_\_\_ Foreign orders outside U.S. and Canada, add \$10.00 additional postage and handling.

\$ \_\_\_\_\_ Priority 2-day delivery (U.S. only), add \$5.00 additional postage and handling.

\$ \_\_\_\_\_ Total Enclosed

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE/PROVINCE: \_\_\_\_\_

ZIP/POSTAL CODE: \_\_\_\_\_

\_\_\_\_\_ Check/Money Order \_\_\_\_\_ Mastercard \_\_\_\_\_ VISA

Credit card no. \_\_\_\_\_

Expiration date: \_\_\_\_\_

Signature: \_\_\_\_\_ (required)

Daytime phone no.: \_\_\_\_\_

Send your order to COMPUTE's Ultimate Windows Disk, 324 West Wendover Ave., Ste.200, Greensboro NC 27408. Please allow 4 to 6 weeks for delivery.

PRIORITY ORDERS: Address to COMPUTE's Ultimate Windows Disk, Dept. WX, 324 West Wendover Ave., Ste. 200, Greensboro, NC 27408.

\*Postage and handling for standard delivery (4-6 weeks) is \$3.95 per disk. Additional charges apply for express delivery and foreign orders. Offer expires March 31, 1994.

ALL ORDERS MUST BE PAID FOR IN U.S. FUNDS BY CHECK DRAWN ON A U.S. BANK OR BY MONEY ORDER. MasterCard or VISA accepted only for orders over \$200.00.

Windows is a trademark of Microsoft Corporation.



# Elvis Is Alive

... and well, with 24 other artists in the hottest, least expensive, most professional sounding, MIDI Karaoke on the market today!

Customize each song to fit your voice perfectly with our pitch and speed controls. Use any of our 25 song selection — from Broadway greats to today's biggest hits — or create your own hits ... it's easy since MIDI Karaoke uses standard MIDI files.

But wait, there's more ... Turtle Beach MIDI Karaoke is the only Karaoke application with the bouncing ball. Yes, from word to word, our bouncing ball guides you perfectly through the song so you sing the right words at the right time.



AND...most, most, most importantly, it's the only Karaoke application that allows you to record your own voice directly to the hard drive while you're singing and then play back the entire file — music and voice together!!

So don't get all shook up. Get all this and more for only \$49!

See your favorite dealer, or call **800-845-5640** and order your Turtle Beach MIDI Karaoke today.



**WORKS WITH ANY SOUND CARD!**

**TURTLE BEACH SYSTEMS**

P.O. Box 5074 • York, Pennsylvania • 17405 • 717-843-6916 • FAX: 717-854-8319

Circle Reader Service Number 193

## REVIEWS

around the edges and weak in areas: incomplete screen redraws, help text wider than its window, and a file viewer that displays only text files.

To its credit, RAF has an uninstall feature. Unfortunately, it doesn't go through your 256-character filenames prompting you to rename them to DOS names, so if you don't rename them before uninstalling, you're left with the strange, indecipherable filenames.

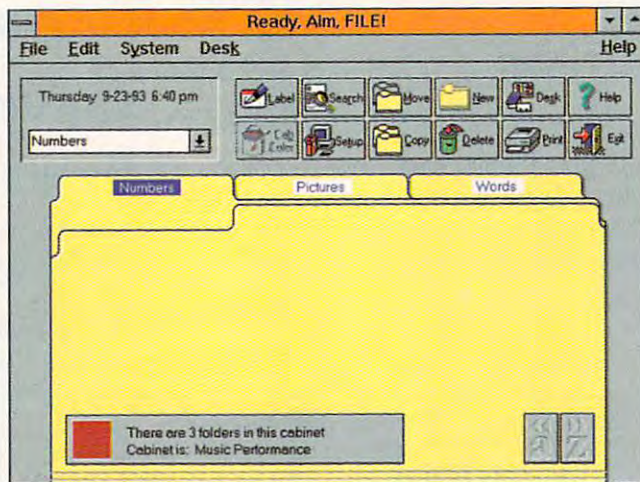
While RAF seems to be aimed at novices, inexperienced users are likely to get in trouble with it. VSoft offers a 30-day money-back guarantee, so you might want to give it a try and see if it fits your needs.

J. BLAKE LAMBERT

VSoft  
(800) 845-4843  
\$99.95

Circle Reader Service Number 440

134 COMPUTE JANUARY 1994



*Ready, Aim, File! replaces long lists of obscure DOS filenames with folders and 256-character filenames.*

## AMERICANS IN SPACE

If you're a manned space flight enthusiast, Americans in Space is a must-have package for your multimedia PC. This comprehensive CD-ROM stylishly chronicles the U.S. manned space pro-

gram from its beginnings to the present day space shuttle and the upcoming space station. Watching and listening to a riveting blend of still pictures, animation, and narration, you can either follow the progress of America's manned space projects across the historical time line or zoom directly in on a

particular subject of interest.

Upon launching the software, you have three options. Beginners can consult the Pilot's Manual for usage information. Once you've been briefed on piloting the program, you can travel to Mission Control for access to over 500 photographs and over an hour of video and narration. Finally, the Express Tours selection offers overviews entitled The Race to the Moon, Turning Points, Disasters, Living in Space, and Cruising the Planet.

The Americans in Space user interface makes navigation a breeze. In both Express Tours and Mission Control, you choose options from a simulated control panel using the mouse.

There are eight selections in Mission Control: Prologue, Mercury, Gemini, Apollo, Skylab, Apollo-Soyuz, Space Shuttle, and Space Station. If you click on Apollo-Soyuz, you're given only one selection, since the program had only a single mis-

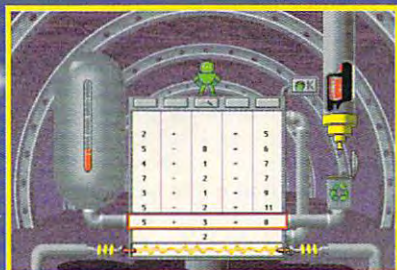


# Boldly Go Where No Math Program Has Gone Before!

Over 1.5 million Math Blaster's sold!  
The world's best-selling math program just got better!



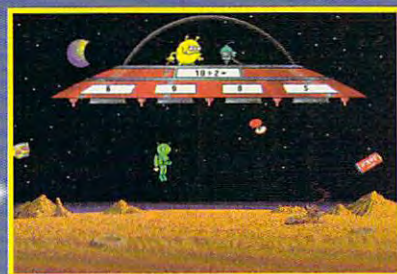
Oh no! The Trash Alien has captured Spot and left behind a trail of litter. In Trash Zapper, your mental math skills are needed to help clean up the mess.



The Number Recycler can convert trash into fuel but Blasternaut needs your problem-solving abilities to make it work. Recycle all the trash and you're ready to go!



You've tracked the Trash Alien to his home planet. But you haven't saved Spot yet! Use your mental math skills to help Blasternaut calculate his way through the Cave Runner game.



Finally, Blasternaut and the Trash Alien are face to face in the Math Blaster game. It's a battle of the numbers and Spot's fate is in your hands—good luck!

**M**ath Blaster® In Search of Spot launches the world's best-selling math program to a whole new level of learning and fun! Kids will join Blasternaut on an all-new action-packed adventure to rescue his robot pal Spot. As they search the universe, they'll boost their mental math and problem-solving skills into the stratosphere!

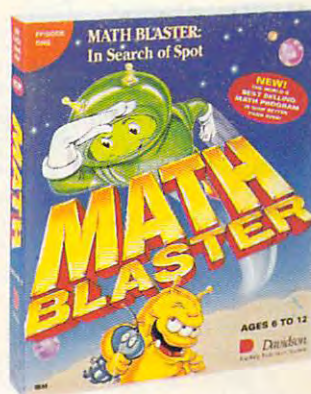
America's favorite math software for ten years running now gives parents and kids even more to love...

**More math content than any other program!**

Now with over 50,000 different problems available in nine key subject areas: Addition • Subtraction • Multiplication • Division • Fractions • Decimals • Percents— Plus two new topics: Estimation and Number Patterns.

**More fun than ever before!**

Exciting new learning games, out-of-this-world VGA graphics, digitized speech, sound effects and music will keep kids so dazzled they'll never want to come down to Earth! And for even more variety, there are now two ways to play: focus on a single activity or take off on a mission that combines all four into one awesome learning adventure!



IBM, Tandy and PC Compatibles  
Windows version available Nov. 93

**Ages 6 to 12**

"Kids have always loved Math Blaster, and Math Blaster: In Search of Spot is no exception. It's even better than its predecessors—more fun and more educational."

Rob Bixby  
Compute Magazine

Order Toll Free  
(800) 545-7677 or (310) 793-0600

Suggested retail price:  
\$59.95 MS-DOS

Available at Babbage's, Best Buy, CompUSA,  
Egghead Software, Electronics Boutique,  
Software Etc. and other fine retailers.



Davidson.

Teaching Tools From Teachers  
Circle Reader Service Number 151



www.commodore.ca

sion. But if you choose Gemini, you're then able to select from any of the ten Gemini missions, as well as from a project overview. The overview summarizes the purpose and history of the selected program and can be printed for future reference. You can choose to watch a slide show or movie about the program. There are three Gemini movies: The Gemini Launch Sequence, Gemini-Agena Rendezvous Test, and Gemini Reentry and Splashdown. The high-resolution images are beautiful and finely detailed throughout the program.

When you select an individual mission, the mission patch is displayed along with descriptive text, and several options are presented which let you view mission statistics, astronaut profiles, or a slide show of the mission. All relevant facts such as mission dates are presented on the control panel.

The Express Tours selection presents narrated slide-show histories of various aspects of the space program. You can view a full-screen slide show, but there's no provision to stop and start the show when using this option. With the simple slide show, you view smaller pictures on the control panel at your own pace, and you can blow up pictures you're particularly interested in to full-screen size.

The Americans in Space package includes versions for both MPCs and Macintoshes. With over an hour of full-motion video, more than 500 images, and narration to accompany it all, this is a fascinating multimedia presentation. We can highly recommend this wonderful space program.

BRUCE M. BOWDEN and  
MARGARET A. BOWDEN

Multicom  
(800) 245-4525  
\$59.95

Circle Reader Service Number 441

## FREDDY PHARKAS, FRONTIER PHARMACIST

If you drop everything to catch *Blazing Saddles* on the late show—for the 10th or 12th time—then Freddy Pharkas, Frontier Pharmacist is the game for you. Al Lowe, creator of the megahit Leisure Suit Larry series, straps on his spurs to give the Wild West a sharp and painfully funny poke in the ribs. Depending on your tastes and social sensibilities, this could be one of Sierra On-Line's most enjoyable graphic adventures yet.

Like Mel Brooks's classic western parody, Lowe's creation allows no saddlesore stereotypes to go unscathed. True to form, Lowe also manages to slap, tickle, and goose just about every ethnic, religious, and sexual persuasion on both sides of the Rockies. Although not as entirely adult themed as the Leisure Suit Larry games, there are many innuendos that may make you cringe applied to both man and beast. Authentic western outhouse humor also plays a role, showcasing Lowe's perennial sixth-grade disposition. It's all in great fun, and a solid new direction for this talented comedy writer.

The game gets off to a hilarious start with the sing-along "Ballad of Freddy Pharkas," describing how our hero gave up a career as a gunslinger for his first true love: pharmacy. Freddy sets up shop in a friendly,

but very weird, gold-rush town, where he catches wind of a plot to destroy the tiny mudhole. To save the day, you must solve a sequence of puzzles involving everything from stampedes (of snails, no less) to outbreaks of terminal flatulence. Most solutions are object-oriented, merely requiring you to collect and combine various graphic elements. The fun isn't just in solving the puzzles but in jumping through increasingly outrageous hoops along the way.

The game's best challenges unfold in Freddy's backroom laboratory. Armed with the superbly written *Modern-Day Book of Health and Hygiene*, you must diagnose various maladies and correctly mix the prescribed remedy. It's a fun break from the action, and by happy coincidence, it also doubles as the game's copy protection. Other diversions include realtime gun duels, sly card sharks, cantankerous tinhorns, and a borderline-tasteless interlude with a sheep. What little free time you do have is spent courting the shy, lovely schoolmarm.

Fashioned with Sierra's new graphic interface, gameplay flows smoothly. You navigate the game with a series of western-related icons: cowboy boots (walk), wire-rimmed spectacles (look), a gloved hand (touch—or grope, as the case may be), and a saddlebag (inventory). Graphics are good, rendered with suitable cowpoke panache, slightly hampered by the use of low-resolution VGA. Ambient sound effects help accent the humor, but it would be nice to see (and hear) an all-talkie CD-ROM version.

Are you tired and run-

down from the usual graphic adventures? Slingsight gags and one-liners, Freddy Pharkas, Frontier Pharmacist delivers the cure for what ails you.

SCOTT A. MAY

Sierra On-Line  
(800) 326-6654  
\$69.95

Circle Reader Service Number 442

## COACTIVE CONNECTORS

The Coactive Connector box promises that the network device is "so easy, you can install each computer in five minutes. By yourself." If you've ever tried to network computers before, you'll greet that claim with skepticism. But it's absolutely true.

The Coactive Connector for DOS and the Coactive Connector for Windows are networking products for small offices. Any combination of up to 32 DOS and Windows personal computers is possible. There is also a Coactive Connector for Macintosh which ties Macintosh computers and Apple LaserWriter printers into your DOS/Windows network—a handy way to get inexpensive cross-platform connectivity.

Physically, the Coactive Connectors for DOS and Windows are small units that plug into the parallel ports of your computers. The port can still host a printer. The advantages of the Coactive Connectors are ease of installation, simple setup and administration of the network, and low cost per computer networked. *Low cost* translates to \$149.95 per DOS computer and \$29.95 per Mac added to the network.

We extensively tested a three-computer Coactive

# ARCTIC BARON

The year is 2022 and global warming is threatening the very existence of mankind. Scientists put "Operation Blind" into effect to reverse the process, but something goes seriously wrong! The Earth is plunged into a nuclear winter and the sun becomes permanently eclipsed.

Centuries after the disaster, a new world order has been established and the Viking Union hold the power. They dominate the rail network and the only source of money – coal – and aren't going to easily give up their monopoly.

You command a gigantic steam powered train and use it to journey to towns to trade in supplies, slaves and mammoths. Your raw instincts will help you pull your survival plan together from the information you obtain along the way. Your mission is vital: free the planet from perpetual winter and economic slavery.

Your quest for the sun is one of danger and excitement... become the Arctic Baron... free your people!



Available for IBM PC and Amiga

**ReadySoft Incorporated**  
30 Wertheim Court, Suite 2  
Richmond Hill, Ontario, Canada L4B 1B9  
Tel: (905) 731-4175 Fax: (905) 764-8867

 **Silmarils**

 **READYSOFT**

Connector network here, running two machines with Windows and one machine using just MS-DOS. The only difference between the Coactive Connector for DOS and Coactive Connector for Windows is the software.

Installation is easy. The manuals, entitled *How to Hook This Stuff Up*, are full of clear drawings showing step-by-step hookup. We transferred files from machine to machine, printed files from all computers on the network using a printer attached to just one computer, and ran programs installed on one computer from all the others on the network. No problems were encountered.

The Coactive Connectors are an excellent selection for a small office's first network. Larger networks cost hundreds of dollars more and require technicians to install. Some also need an additional computer to act as a file server, which is a computer dedicated to storage of programs and files available to everyone on the network. The Coactive Connectors eliminate the file server by sharing the resources of your present computers.

The major disadvantage is relatively slow speed. This is true of any peer-to-peer network which is sharing resources instead of using a separate file server. If your network usage calls for many users transferring vast amounts of data, go to a full-fledged, Novell-type network. Otherwise, the Coactive Connectors will have you networking literally in minutes.

RALPH ROBERTS

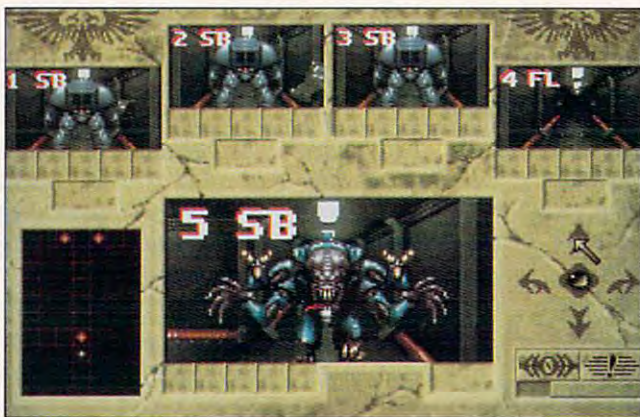
Coactive Computing  
(415) 802-1080  
\$149.95

Circle Reader Service Number 443

138 COMPUTE JANUARY 1994

## SPACE HULK

The Space Marines are looking for a few good men. So are the Genestealers, though admittedly not for the same purpose. Welcome to the dark, feral world of *Space Hulk*, a fast-paced, ultraviolet adapta-



*Electronic Arts' Space Hulk is an ultraviolet blast-fest that's reminiscent of the action in the Alien films.*

tion of the Games Workshop's popular tabletop game. Fans of the movie *Alien* will quickly identify the action as a bug-hunt supreme, playing space tag against the deadliest of prey. The winners move on to greater glory; losers decorate the walls with red.

The manual sets up the savage story line about a race of superbeings bent on universal domination. Hidden in huge, abandoned ships known as Space Hulks, the Genestealers spread their mutated seed throughout the galaxies. Summoned by the Emperor, you play an Imperial Captain, charged with leading squads of elite Terminators on ship-to-ship missions to "cleanse and burn."

There's plenty here to keep you busy: five basic and nine advanced tutorials, 16 single and multisquad

scenarios, and the exhausting 22-mission Deathwing Campaign. Mission objectives vary but usually require securing specific areas; retrieving artifacts; and, most importantly, getting them before they get you.

Your role is to direct the action from two distinct van-

side, with names like Lightning Claws, Heavy Flamer, and Storm Bolter. Victims explode with a sickly satisfying belch of blood and body parts that don't magically disappear but pile up like last week's garbage. It's demented, to be sure, yet irresistibly exhilarating when the action erupts in nonstop, heart-pounding carnage.

The realtime strategic planning screen offers an overall view of each mission. Here you can program movement and firing commands for each Terminator in your assigned squads. This multitasking feature is not only a tremendous boon to your mission success but also cranks up the intensity several notches. The Freeze Time tool momentarily suspends the action, allowing you to dry your palms and gather what's left of your wits.

Armed with a slick, streamlined interface and wondrously deranged special effects, *Space Hulk* is a bug blaster's nightmare come true.

SCOTT A. MAY

Electronic Arts  
(800) 245-4525  
\$59.95

Circle Reader Service Number 444

## ECCO Professional

ECCO Professional is a Windows Personal Information Manager (PIM) that's also a database. Happily, though, it doesn't feel like a database most of the time.

ECCO is intuitive throughout, with three basic views: PhoneBook, Calendar, and Outline. To create an appointment or action item with someone in your PhoneBook, simply drag that person's name from the PhoneBook to the Calendar or To-Do list. ECCO notes the ap-



# Purple Car Lands on Moon!

Due to a freak accident at the Fireworks Factory, Putt-Putt is blasted to the moon. There he meets terrain vehicle left behind Putt and Rover rebuild a rocket, good deeds for meet the Man in bound. Putt-Putt fits of cooperation

Rover, a lonely little lunar by the astronauts. Putt-must work together to and accomplish a few the Moon People before they the Moon and are homeward Goes to the Moon teaches the bene-and the lasting value of friendship.

For a  
**FREE Demo**  
IBM-PC or Color Macintosh  
Call (206) 485-1212  
\* Offer good while supplies last

# Putt-Putt GOES TO THE

Ages  
3-8

IT  
TALKS!



Wow! You were here with the astronauts???



Want to buy our rocket? It's for sale. Only 10 glowing moon crystals.



Hello! I'm Governor Moonbeam. And you must be?



pointment in both places, inserting a note with the phone number.

Highlight a name and click on a Dialer icon, and an autodial window pops up, a Logged Call entry appears below the name in the PhoneBook, and logging begins when you dial.

You can import either tab-separated or comma-separated values files into the PhoneBook. Just show ECCO which fields in the import file match preset ones in the ECCO file and give names to fields that don't already exist in ECCO. (Sharp Wizard and HP 95LX owners can order a free data-transfer application; others may purchase a file-conversion program that supports numerous data formats.)

You can export your information for use in a mail merge or use the ECCO Shooter, an arrow icon that sticks to the title bar of the active window. The Shooter lets you exchange data with another Windows program as if you'd used the clipboard cut-and-paste functions by selecting a program from a pop-up list. ECCO also supports object linking and embedding.

ECCO makes linking information effortless. When you drag an item (person, appointment, outline, to-do) from one view to another, a copy remains in the original location. Edit any of these copies, and the others change, too. This way you can have several methods of accessing the information later.

You can view combinations of a personal-organizer page and a spreadsheet, with a fixed column on the left and scrolling columns on the right for extra information. You can navigate quickly in the views, and you can

search, sort, and filter the items. Items in any view can be text or graphics.

The Calendar View provides daily, weekly, and monthly displays and also contains the Tickler (to-do list). You can also set simple or custom alarms and create recurring events.

has many more features than could be covered here. It takes a while to get used to some of ECCO's advanced features, but it's useful straight out of the box. If you're just looking for a simple day book, you might find Lotus Organizer or the shareware Time and Chaos

Records brings that same popular content to your multimedia PC.

Installation is easy. The drivers for the program take up about 4MB of storage on your hard drive. The program is completely menu- and button-driven, and you're given many choices on how to navigate through the masses of information contained on the disc.

The Browse Records button lets you choose any record from "Acrobatics: Longest Inverted Flight" to "Zoos: Oldest." Many of the 3621 entries are fairly detailed. There's also the traditional *Guinness* inclusion of obscure knowledge among the more common facts. For example, in the "Words" category, you'll find the longest Icelandic word, *Haecstaretarmalautningsmaour*, with 29 Icelandic letters (transliterating to 31 in English characters) and meaning "supreme court barrister."

Using the Word Search button, you can find records related to a specific subject. You can use *and*, *or*, and *not* operatives to narrow the search. For example, searching for *computer* brings up 30 matching records. These start with a reference to "Pre-historic Reptiles: Largest chelonians," which is listed because of a mention in the article of computed weight. In this case you could narrow the search by looking for *computer and machine*.

You can search by category using the Topic Index button, which brings up a list of 11 categories ranging from "Earth and Space" to "Sports and Games." Each of these has subcategories. "Science and Technology" provides 14 subcategories ranging from "Elements" to "Space Flight." If you choose "Elements," you're



*ECCO Professional combines the best features of PIMs and outline processors; a "lite" version is now available as well.*

As with the other views, Outlines can display columns of dates, names, or other useful information. It's easy to change the color or style of all items on a particular level, and you can expand and collapse the Outline as you work.

Folders let you organize items that you want to keep together. Standard folders include the PhoneBook and Scheduling folders, but you can easily create your own. ECCO lets you drag items into a folder or drag folders into or out of outlines (to view or remove them).

ECCO includes templates to help you get started with specific uses: research, sales, legalities, and project management. It handles information and ideas well, produces nice printouts in handy organizer sizes, and

a more economical choice. But ECCO's outline and database functions make it far more than a simple PIM. Arabesque is so sure you'll like it that the company provides a 60-day money-back guarantee on the program.

J. BLAKE LAMBERT

Arabesque  
(206) 869-9600  
\$395

Circle Reader Service Number 445

## GUINNESS MULTIMEDIA DISC OF RECORDS

The *Guinness Book of Records*, first published in 1955, is the world's best-selling copyrighted book. Now, with flair and a solid, well-thought-out design, the Guinness Multimedia Disc of

A rift in the fabric of time and space, a deadly foe from the past and the judgment of all humanity await the crew of the Starship Enterprise™  
... the five year mission continues.



Join Captain James T. Kirk and the crew of the U.S.S. Enterprise™ in all new episodes that place *you* in command. Beam down to alien worlds, communicate with new life forms and take the helm as you join the legendary crew of the Starship Enterprise™ in their continuing five year mission to explore the final frontier.

Software © 1993 Interplay Productions, Inc. All rights reserved. Star Trek™, ® and © 1993 Paramount Pictures. All rights reserved. Star Trek is a registered trademark of Paramount Pictures.

Circle Reader Service Number 253

 17922 Fitch Ave.  
Irvine, CA 92714  
(714) 553-6678  
[www.commodore.ca](http://www.commodore.ca)

given three topics: "Matter," "Subnuclear Particles," and "The 109 Elements." Each of these selections provides more information than you'd expect from a database. Under "The 109 Elements," for example, you don't simply get a periodic table, but an actual reference to such things as which elements are most common, which are the rarest, which have the highest toxicity, and so on.

Half of the fun of the paper edition is just flipping through and randomly discovering information. The Random Record Explorer button will let you do this with the disc version. There's also a Superlatives Index button, which lets you select records by superlatives such as *best*, *worst*, *oldest*, *youngest*, *windiest*, *hottest*, and *widest*.

Select the Picture Index button to start with the same 11 categories as the Topic Index. From here you can access the 1062 images on the CD.

The Movie Index button gives you a total of 37 movies. This index, to our dismay, had only four categories: "Animals and the Earth," "Human Beings," "Technology and Space," and "Transportation." We found that most of these didn't have sound—not even the entry for the howling monkey! We did like the fact that movies can be advanced frame by frame, forward or backward, to examine details, but we didn't like the lack of sound or the jerkiness of the animations that did have sound.

Although a help reference booklet isn't included with the packaging, there's extensive help on the CD itself. In most cases, though, you won't need it; the pro-

gram is very intuitively designed. Most of the information here is trivial, but it's often educational and always a lot of fun.

BRUCE M. BOWDEN and  
MARGARET A. BOWDEN

Grolier Electronic Publishing  
(203) 797-3530  
\$99

Circle Reader Service Number 446



The NCR 3150 sports a fast 25-MHz 486SX processor, available active-matrix color, and a front-mounted trackball.

## NCR 3150

Two years ago, NCR established itself as an important player in the notebook market with the Safari 3170. This year, it's introduced another major machine—the 3150 notebook.

The 3150 is sleek, light, and fast. It's powered by a 25-MHz 486SX processor, and has a 9.5-inch screen, local-bus video, PCMCIA Type 2 slot, a 1.44MB floppy drive, and external trackball. The 3150 also comes with 4MB of RAM (upgradeable to 20MB), and a removable hard disk of 80-170MB capacity. Video options in-

clude monochrome, passive-matrix color, and active-matrix color. The monochrome and passive matrix displays can be upgraded to active matrix.

The review unit I tested featured active-matrix LCD, an 80MB hard disk (too small for a machine of this caliber), and 4MB of RAM.

Looking at the outside of

can attach to the front of the machine. When I use a trackball, I prefer it to be on the side of the computer, and I found this front position to be awkward.

If you don't want to use the trackball, however, you can configure the cursor keys to do double-duty for mouse movement. I found this arrangement to work very well in Windows, but the key combination you have to use to switch back and forth between cursor and mouse takes some getting used to.

The 3150's active matrix screen is excellent. It's one of the best color displays I've seen on a notebook. The colors are sharp and saturated, and it's a joy to use.

This machine was built to run Windows and it shows. With the 486 processor and local bus video, Windows really moves. If you're used to laptops being sluggish with Windows, you'll really be surprised with the 3150.

The 3150 can use either nickel hydride (NiMH) or nickel cadmium (NiCAD) batteries. The computer senses which type of battery is attached, and batteries can be changed while the computer is on. Power-saving features are everywhere in this machine, but battery life is still about two hours for the color model.

The cost for the 3150 varies according to the screen and hard disk options, but prices range from \$1,995 for the monochrome model with a 80MB hard drive to \$3,805 for an active-matrix color model with a 170MB hard drive.

The 3150 is well-designed, well-built, fast, and stylish. With a removable hard drive, PCMCIA slot, upgradeable video, it's also modular and easy to en-

the 3150 you'll find a sturdy, attractive case that's dark brown with putty details. Open the case and you'll see these same colors repeated with turquoise accents on important keys. Status information is provided by small LEDs directly under the display.

The 3170's keyboard is very good for a notebook. The layout is nearly full-sized, with an inverted T for cursor keys. There are also dedicated Page Up, Page Down, Home, and End keys, all of which are a plus.

As I mentioned above, there's a trackball which you

An AMTEX Pinball Classic ♦ Game # 2



# Deal.

AMTEX proudly announces their latest release in the Pinball Classic series! With the same award-winning technology that brought you Tristan™ and Eight Ball Deluxe™, AMTEX continues to reintroduce some of the greatest pinball games in history! Also look for FunHouse™ and the pinball construction kit, soon to be released. For PC and Mac systems.



This is what pinball was in the days of the classics. A flipper, a ball, and a few elusive targets. But don't be fooled by simplicity. This isn't a "luck of the draw" card game. When you have to shoot for the high hand, skill and strategy are the rule. Hit the cards out of order, and you're back where you started. It's a challenge that made Royal Flush one of Gottlieb's most popular drop target games. Now AMTEX takes you back to the old pinball arcade with the authentic sights, sounds and flipper sensation of the original. Learn to maneuver the ball through the open playing field for the ultimate score — "The White Joker". Odds are, you can bet on Royal Flush to keep you challenged. But don't gamble when it comes to computer pinball. Choose the proven winner. AMTEX.



Distributed By  
  
Broderbund™



For product information, send your name and address to:  
AMTEX Software Corporation,  
P.O. Box 572, Belleville, Ontario,  
Canada K8N 5B2 or call  
1 613 967-7900  
Fax: 1 613 967-7902

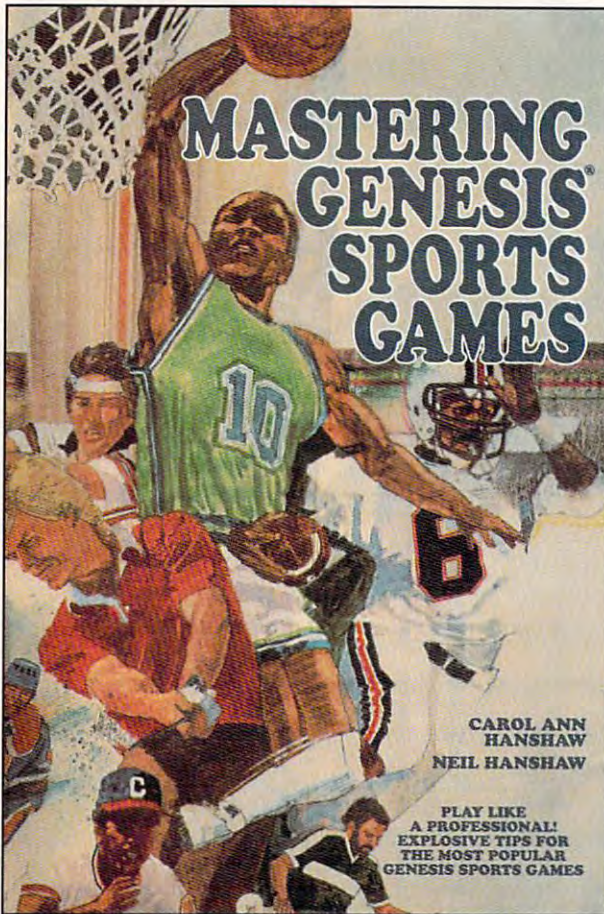
# ROYAL FLUSH™

Coming soon at a suggested retail price of \$49.95  
Circle Reader Service Number 157

**AMTEX™**

You can't get any closer than [www.commodore.ca](http://www.commodore.ca)

All trademarks are the property of their respective companies.



## Mastering Genesis™ Sports Games

Whether you play football, baseball, golf, or any other sports games on your Sega Genesis, you'll find the information and tips you need in this guide. Tips and strategies for 19 of the most popular Genesis sports games.

To order your copy send \$9.95 plus \$2.50 for shipping and handling (U.S., \$4 to Canada and \$6 other) to COMPUTE Books, c/o CCC, 2500 McClellan Ave., Pennsauken, NJ 08109. (Residents of NC, NJ, and NY please add appropriate tax; Canadian orders add 7% Good and Services Tax.) All orders must be paid in U.S. funds drawn on a U.S. bank. Mastercard and VISA orders accepted, please include full card number and expiration date. Orders will be shipped via UPS Ground Service. Offer good while supplies last.

Sega and Genesis are trademarks of SEGA.

## REVIEWS

hance. You may pay more for this machine than a mail-order clone, but it might just be worth the investment.

CLIFTON KARNES

NCR  
(800) 225-5627  
\$1995-\$3805

Circle Reader Service Number 447

## PRINCE OF PERSIA 2

Prince of Persia 2: The Shadow & the Flame will probably be called an action game by many players. Then why do I feel I've been on such a splendid adventure?

Choreographed by Jordan Mechner (who also designed the original), this sequel has everything that Prince of Persia offers and much more. At its heart, it's the same basic game: traditional sword fighting, taking baby steps up to ledges

and giant leaps of faith beyond them, trap-evading, abyss-width estimating, ledge-grabbing, ledge-missing (oops), and of course the inevitable red-blotch-among-the-spikes-regarding. You'll be doing a lot of this last one in Prince of Persia 2.

Not to mention some head-scratching. Puzzles of timing and distance were built into the very structure of Prince of Persia, but puzzles for puzzles' sake seem to be more conspicuous here. For instance, it's quite possible to ostensibly complete a segment but then be utterly bewildered as to how to progress into the next because you haven't mastered a given mechanism or trick.

That said, there's a real sense of progression here; it's not just a series of caves with attitude. The action picks up from the moment the prince leaps through the palace window. It follows him across rooftops and as he dives for the stern of a de-

parting ship, on a long trek through caves (familiar terrain from the original game), and on into a ruined palace—a place of disembodied heads that scream when they spot you.

The lifelike animation in Prince of Persia grabbed everyone's attention. Prince of Persia 2 is as realistic as ever (though maybe just a touch less fluid, perhaps on account of the complexity of the sumptuous VGA graphics), and not simply when the character is pulling himself up a ledge or long jumping. Realistic animation comes into play even as the prince plummets to his doom or raises a fiery, blackened hand from his lava tomb.

But while graphic enough to be nasty fun, those death scenes are never really grisly. Prince of Persia 2 has an exquisite sense of balance and proportion and never goes overboard. There's honestly not much in Prince of Persia 2 I'd change, save

the shrieks the prince lets loose when he falls too far. (Die like a hero, you bozo.) This is not simply a worthy sequel but also a wonderful adventure in its own right. The old Prince of Persia has grown up, and Prince of Persia 2 is a true king.

PETER OLAFSON

Brøderbund  
(415) 382-4400  
\$44.95

Circle Reader Service Number 448

## FLASHBACK

Action-adventure games just don't get much hotter than Flashback, SSI's dazzling follow-up to last year's breakthrough hit, Out of This World. Far bigger and bolder than its predecessor, the title melds cinematic techniques with traditional puzzle-oriented, platform-style arcade fare.

The story unfolds in the year 2142, cast in the murky off-world tones of a novella by Philip K. Dick (whose

P O S I T R O N I C

# BRIDGE



Artificial Intelligence Based

## Artificial Intelligence now a reality!

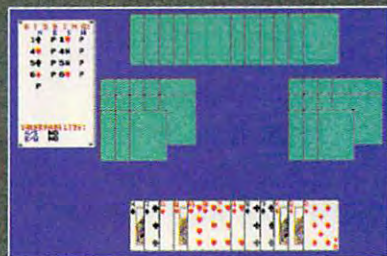
The challenge of computer bridge will never be the same with the introduction of Positronic Bridge, the first artificial intelligence based bridge game. Whether you are a beginner or expert, Positronic Bridge with its cutting-edge computing technology automatically improves its skill level as you improve yours, so the game always remains a challenge.

Included free with the program is the best-selling book "The Basics of Winning Bridge" that will have you playing bridge in just one hour. You can then improve your bridge skills using the practice mode and help keys.

Other features include: "No Cheat" gameplay (the computer doesn't look at your cards to make decisions), rubber or duplicate bridge, standard bidding, simple signaling, random deals or preset input, show/hide opponents cards.



Play Screen



Bidding Screen

### Endorsed By Bridge Experts

"You can't outgrow Positronic Bridge. Two thumbs up!"  
Mike Lawrence, Berkeley, CA, USA

"Positronic Bridge will give you the battle of your life."  
Eric Kokish, Montreal, Canada

"The game you can teach to be as good as you are"  
Tony Forrester, London, England

 **Positronic**

 **READYSOFT**

**ReadySoft Incorporated**  
30 Wertheim Court, Suite 2  
Richmond Hill, Ontario, Canada L4B 1B9  
Tel: (416) 731-4175 Fax: (416) 764-8867

Circle Reader Service Number 163

For IBM PC and Compatibles  
[www.commodore.ca](http://www.commodore.ca)

# IS THERE ROMANCE IN YOUR FUTURE



Live psychics reveal what the future holds for your love life.



**LIVE! Specializing in  
questions of love**  
**1-900  
773-1002**

\$5 first min./\$3 ea. addl. min.

**Use the wisdom of  
psychic forces to  
guide you in money,  
career and happiness**

**1-900  
773-OMEN**

1-900-773-6636

\$5 first min./\$3 ea. addl. min.

**TALK TO A LIVE PSYCHIC!**

For entertainment purposes only. If you are under 18 years of age, please get parental permission. Live psychics are available 24 hours a day. Sponsored by Pet Inc., P.O. Box 166, Hollywood, CA 90078.

PH006

## REVIEWS

work also inspired the films *Blade Runner* and *Total Recall*). You assume the role of Conrad Hart, a scientist who awakes in the synthetic jungles of Titan, Saturn's newly colonized moon. Robbed of your long-term memory and equipped with only a pistol, a Holocube, and the instinct for survival, you embark on a violent, wildly convoluted quest to regain your identity. The entire game boasts more than 200 screens, divided among six levels, for a total of 50 to 100 hours of realtime action. It's a demanding assignment that only the hardest arcade gamers will survive.

The game's standout feature is undoubtedly its lifelike character animation, rotoscoped at a fluid, film-quality rate of 24 frames per second. This phenomenal technique, similar to that used in Jordan Mechner's *Prince of Persia* series, helps break the action free of its two-dimensional boundaries. It's so remarkable, in fact, that you might spend your first few sessions simply admiring the lead character's extraordinary range of physical movement: running, leaping, falling, tumbling, shooting, and other motions, both subtle and exaggerated.

Scattered throughout the game are more than 75 cinematic segues and noninteractive plot enhancements, designed to pull you into the dark, serpentine story line. The game successfully retains the free-form nature of its arcade roots, fashioned along a linear, sequentially structured series of challenges. In Titan's domed city of New Washington, for example, you must obtain a work permit and complete a series of progressively dangerous jobs, earning money for a trip back to Earth. Other highlights include a guest appearance on the lethal TV game show "Death Tower," a capture by mutant aliens, and an absolutely riveting final showdown with a superhuman power. Pass codes allow you to restart your adventure at the beginning of the last level reached.

Nice touches abound, like the explosive report and subtle recoil of your trusty revolver and the incredibly detailed spot animation that enlivens almost every scene. Controls are streamlined and highly responsive, whether you use the keyboard or joystick. The game has excellent support for the four-button Gravis PC GamePad. Three skill levels—increasing both the number and tenacity of your opponents—help keep the challenge fresh and the replay value high.

One of several recent technology milestones in PC arcade entertainment,

SSI's *Flashback* invites and deserves enthusiastic praise.

SCOTT A. MAY

Strategic Simulations  
Distributed by Electronic Arts  
(800) 245-4525  
\$49.95

Circle Reader Service Number 449

## LIGHTNING CD

Newcomers to the world of multimedia computing expect to be dazzled, and few are disappointed. Experienced users, however, know not to expect miracles from a CD-ROM drive. Although one of the most cost-effective means of data retrieval, with drives starting as low as \$150 and discs capable of holding up to 650MB of information, CD-ROM drives are no speed demons. Even top-of-the-line CD-ROM drives find and transfer data at a speed about 15 times slower than the average hard drive.

Before you get discouraged, take a look at Lucid Corporation's excellent *Lightning CD*, a data-caching utility designed specifically for CD-ROM drives. The company claims speed increases of more than 1000 percent in best-case scenarios. Realistically, you can expect an average, consistent speed increase of 20-50 times. For many DOS and Windows/MPC applications, those little numbers can make a huge difference in the performance of your programs.

How does it work? Like all disk caches, *Lightning CD* analyzes and stores frequently used information in RAM. When a program asks for data from hard disk or CD, the computer first looks to its memory cache, and if the data is there it rockets this information to the CPU in a fraction of the normal access time. Caching won't eliminate disc access, but can substantially decrease drive activity. In the data-intensive world of CD-ROM, your computer needs all the help it can get.

Unlike some CD-caching products which store recently accessed data on your hard drive, *Lightning CD* caches directly from RAM. Of course, the more RAM you have, the more information you can store, which determines the overall effectiveness of the cache. If you can't afford at least a 2MB RAM cache—culled from either expanded or extended memory—you won't utilize the program's full power.

A cache works only with frequently repeated disk activities. Although Lucid clearly markets the product at multimedia game players, the linear structure of most CD-based games—such as role-playing or adventures—means the





**NOW AVAILABLE IN BOTH PC/WINDOWS® AND MACINTOSH® VERSIONS**

**Now,**

**“I’m a Penthouse Photographer”**

**doesn’t have to be just a pick-up line.**

**Introducing Penthouse Interactive’s Virtual Photographers Studio.**

So what if you’ve never held a camera. Penthouse Interactive’s Virtual Photo Shoot™ puts you in control of three incredible Penthouse photo shoots. 90 minutes of full-motion (15 fps), high quality video images.

With it, you can use your computer controls to direct three gorgeous Penthouse Pets to a variety of poses, while you choose from multiple camera angles, including close-ups.

Snap pictures of your favorite pets and save them to your hard disk. Later, you can “develop” them by printing out high-resolution color or B&W copies (depending on your printer).

Wondering if you could really cut it as a Penthouse photographer? During the session, the Pets’ comments will let you know. And Bob Guccione himself will critique your finished photos.

No matter how well Mr. Guccione says you’re doing, you’ll want to practice your photography skills diligently, because the game is equipped with hidden surprises to reward your dedication and curiosity.

But once you’ve exhausted your first three Pets, you can stimulate more interest with low-cost “Pet Packs” featuring new models that keep your shoots fresh and exciting.

Of course, just one taste of the allure of being a Penthouse Photographer is enough to start anyone thinking, “People get paid to do this!”

**PC/Windows® Requirements:** At least a 33MHz 386 with 4mb of RAM running Windows 3.1. A Video card that supports at least 256 colors (8-bit color). 16-bit color is preferred. A sound card, for example a SoundBlaster/Pro 16 or a Pro Audio Spectrum/16. Many modern computers are already equipped with sound cards, so be sure to check your configuration first. An MPC-compatible CD-ROM drive. A double speed drive (300kb/sec) is preferred.

**Macintosh® Requirements:** Any Macintosh® computer with an 8 bit (or better) color or grayscale display. A minimum of 5 megabytes of RAM running system 6.0.7 or 8 megabytes of RAM running system 7.0 or higher. A CD-ROM drive. A double-speed (300 KByte) drive is preferred. Apple system software 6.0.7 or higher. QuickTime 1.6 and HyperCard 2.1 are included in your PHI CD-ROM.

**Please rush me the Penthouse Interactive CD-ROM:**

\$129.95 + \$4.50 (shipping & handling) × \_\_\_\_\_ = \$ \_\_\_\_\_ Total Orders = \$ \_\_\_\_\_

Name \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Check  Money Order  Visa  Master Card Credit card holders call toll-free 1-800-466-9435

Card Acc’t # \_\_\_\_\_ Exp. Date \_\_\_\_\_ Signature \_\_\_\_\_

Check one:  PC/Windows  Macintosh I certify that I am 18 years or older.

Payment must accompany order. Allow 4-6 weeks for delivery. CO401

U. S. MAIL ORDER: PENTHOUSE VIDEO, INC., P. O. BOX 310173, NEWINGTON, CT 06113

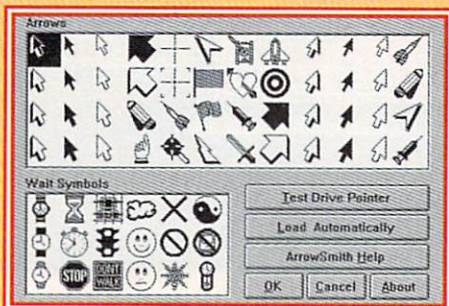
[www.commodore.ca](http://www.commodore.ca)

# COMPUTE's ULTIMATE POWER DISK

Don't miss the dazzling, ready-to-run DOS and Windows programs on this issue's disk!

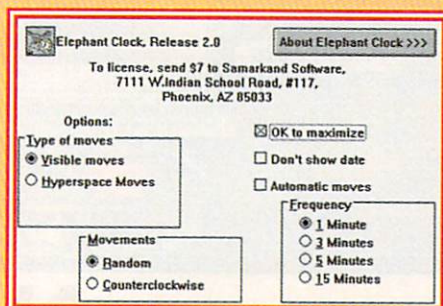
## ArrowSmith

Banish Windows' mouse pointer and hourglass wait symbol from your system.



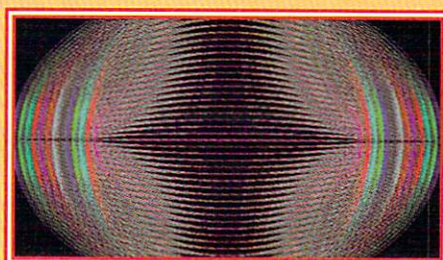
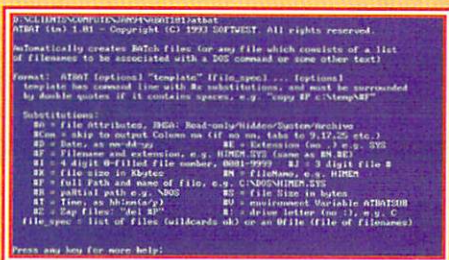
## Elephant Clock

Your clock stays on top but out of the way with Elephant Clock.



## ATBAT

ATBAT builds batch files that execute a repetitive command against a list of filenames.



## Video Effects

Add eye-popping EGA/VGA video effects to your batch files with Video Effects.

Subscribe to COMPUTE's PC Disk, and every other month—six times a year—you'll receive a disk chock-full of great DOS and Windows shareware and freeware programs, including powerful applications, sleek utilities, and eye-popping graphics.

### For Single Disks

**YES!** I want to own my PC. Send me this issue's COMPUTE's PC Disk. I'll pay \$9.95 for each 5 1/4-inch or 3 1/2-inch disk plus \$2.00 shipping and handling per disk.

Please indicate how many disks of each format you'd like:

\_\_\_\_\_ 5 1/4-inch disk(s) at \$9.95 each

\_\_\_\_\_ 3 1/2-inch disk(s) at \$9.95 each

\_\_\_\_\_ Subtotal

\_\_\_\_\_ Sales Tax (Residents of NC and NY, please add appropriate sales tax for your area. Canadian orders, add 7% goods and services tax.)

\_\_\_\_\_ Shipping and Handling (\$2.00 U.S. and Canada, \$3.00 surface mail, \$5.00 airmail per disk)

\_\_\_\_\_ Total Enclosed

Send your order to COMPUTE's PC Disk  
324 W. Wendover Ave., Ste. 200  
Greensboro, NC 27408

All orders must be paid in U.S. funds by check drawn on a U.S. bank or by money order. MasterCard or VISA accepted for orders over \$20. This offer will be filled only at the above address and is not made in conjunction with any other magazine or disk subscription offer. Please allow 4-6 weeks for delivery of single issues or for subscription to begin. Sorry, but telephone orders cannot be accepted. Disks available only for IBM PC and compatible computers. Offer good while supplies last.

### For Subscriptions

**YES!** I want to save even more! Start my one-year magazine and disk subscription to COMPUTE and COMPUTE's PC Disk right away.

\_\_\_\_\_ 5 1/4-inch \$49.95 per year

\_\_\_\_\_ 3 1/2-inch \$49.95 per year

For delivery outside the U.S. or Canada, add \$10.00 for postage and handling.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State/Province \_\_\_\_\_  
ZIP/Postal Code \_\_\_\_\_  
Total Enclosed \_\_\_\_\_  
\_\_\_\_\_ Check or Money Order \_\_\_\_\_ MasterCard \_\_\_\_\_ VISA  
Credit Card No. \_\_\_\_\_  
Expiration Date \_\_\_\_\_  
Signature \_\_\_\_\_  
Daytime Telephone No. \_\_\_\_\_

Send your order to COMPUTE's PC Disk  
P.O. Box 3244  
Harlan, IA 51539-2424

# Advertisers' Index

Reader Service Number/Advertiser	Page	Reader Service Number/Advertiser	Page	Reader Service Number/Advertiser	Page
194 Abacus	25	253 Interplay	141	261 Sierra OnLine	159
244 Access Software	66,67	222 Interplay	97	Sign Up	162
252 Access Software	73,73	232 ISL Software Corporation	166	171 Sir Tech Software	51
Adam & Eve	169	186 Jack Daniels	48	109 Smart Luck Software	166
Adventure LearningWare	162	231 Jackson Marking Products Co. Inc.	162	142 SMC/Software of the Month Club	160
229 Amish Outlaw Shareware Co.	164	Kid Secure of America	162	126 SoftShope Inc.	166
157 AMTEX Software Corporation	143	LACE	167	210 Software Support International	164
America OnLine	69	178 Logitech	13	Software Toolworks	IBC
233 Arnie's Answers	160	199 Mallard Software	121	145 SOMICH Enterprises	166
137 Automap Inc.	105	188 Mallard Software	119	201 Spectrum Holobyte	IFC,1
Bare Bones Software	164	206 Markle Foundation, The	150	154 Spirit of Discovery	23
Best Personalized Books	163	158 Maxis	125,127	203 Star Micronics	21
173 Blue Valley Software	164	113 MECC	33	130 Starware Publishing	167
Boomerang Software	160	185 MediaVision	79	Stonehenge Viewpoint	169
121 B.R.ROMS	169	249 Megatech	39	179 SubLogic	82,83
167 CH Products	42	119 MicroProse	65	202 Thinking Software Inc.	163
174 Citizen American Corp.	9	MicroSoft	91	147 Thrustmaster	161
248 Colorado Spectrum	43	146 MicroTech	31	Time Warner	77i
232 Colorado Spectrum	45	191 Needham's Electronics, Inc.	161	193 Turtle Beach Systems	134
150 CompSult	168	177 New World Computing	153	170 UNI-ROM	160
240 Comptons NewMedia	89	No-Frills Software	166	112 U.S. Robotics	27
122 Compuquest	49	NRI/McGraw Hill	17i,133i	127 Value Software Inc.	164
155 Computer Associates	15	141 Odyssey OnLine	168	180 Velocity Development Corp.	93
Computer Book Club	117	160 Origin	99	132 Virgin Games	70,71
Computer Business Services	162	156 Pacific Microelectronics	165	195 Virgin Games	62,63
225 Computer Friends	166	168 Parsons Technology	19	172 Wedgwood Rental	166
204 Computer Gallery	164	221 PC Enterprises	164	128 Windows 900	165
ComputerWise Video	169	237 PC Zone, The	29		
Comtrad	122,123	250 PC-SIG	168	Product Mart	160,161,162,163,164,165,166,167,168,169
125 Creative Labs	3	235 Pendragon Software Library	166	Classifieds	170,171
144 CyberDreams	131	Penthouse Interactive CD ROM	147,157	Catalog Corner	169
D & K Enterprises, Inc.	163	107 Penthouse Modem	165	104 COMPUTE Books	77,144,154,158
247 DataStorm Technologies	BC	207 Pixel Perfect	132		
151 Davidson	37	224 Profit Group, The	167		
106 Davidson	135	243 Psynopsis	41		
161 Delphi Internet Services	44	241 Psynopsis	113		
131 DemoSource	161,169	226 Psynopsis	114		
208 Disk-Count Software	155	227 Psynopsis	81		
Dr T's Music Software	129	Pure Entertainment	146		
176 Electronic Arts	54,55	196 Quadra Interactive	47		
184 Electronic Arts	58,59	Rain Forest, The	168		
230 Fairbrothers	164	138 Ramco Computer Supplies	168		
134 Fantazia concepts, Inc.	166	251 ReadySoft Inc.	137		
Fitness 1+	169	163 ReadySoft Inc.	145		
115 Free Spirit Software	151	246 ReadySoft Inc.	84		
198 HealthMax	35	135 Revell CD	95		
117 Hollyware Entertainment	109	212 SafeSoft Systems Inc.	164		
245 Home Automation Laboratories	168	School of Computer Training	162		
111 Humongous Entertainment	139	120 Serif PagePlus	11		
IBM	5,53	116 SeXxy Software	168		
183 Impressions	61	Sierra OnLine	57i		

COMPUTE's Editor 900 Line	157
COMPUTE Free disk	133
COMPUTE's SharePak Disk Subscription	103
COMPUTE'S Ultimate PC Power Disk	148
Kathy's Exercise Video	77

## CREDITS

Cover: Mark Wagoner; cover screen shot: Computer Support's Arts & Letters; page 6: E. Salem Krieger/The Image Bank; page 72: Molkenthin Studio/The Stock Market; page 73: Ron Chapple/FPG; pages 81-82, 84, 86, 88, 90, 92, 94: Rob Schuster; page 100: Mark Wagoner; page 106: Mark Wagoner; page 110: Mark Wagoner; page 115: Javier Romero Design/The Image Bank.

## IMPORTANT NOTICE FOR COMPUTE DISK SUBSCRIBERS

COMPUTE offers two different disk products for PC readers: the SharePak disk and PC Disk. SharePak is monthly and has a subscription price of \$59.95 for 5 1/4-inch disks and \$64.95 for 3 1/2-inch disks. A subscription to SharePak does not include a subscription to the magazine. PC Disk appears in odd-numbered months and has a subscription price of \$49.95, which includes a subscription to COMPUTE. You can subscribe to either disk or to both, but a subscription to one does not include a subscription to the other.

## COMPUTE LIBRARY CASES



Store your issues of COMPUTE in our new Custom Bound Library Cases made of blue simulated leather embossed with a white COMPUTE logo on the spine. It's built to last, and it will keep 12 issues in mint condition indefinitely. Each case has a gold transfer for recording the date. Send your check or money order (\$8.95 each, 3 for \$24.95, 6 for \$45.95) postpaid USA orders only. Foreign orders add \$1.50 additional for postage and handling per case.

**TO: COMPUTE Magazine**  
**Jesse Jones Industries**  
**499 E. Erie Ave., Phila., PA 19134**

**CREDIT CARD HOLDERS**  
 (orders over \$15)

CALL TOLL FREE: 1-800-825-6690.

Or mail your order, clearly showing your account number and signature. PA. residents add 7% sales tax.

**SATISFACTION GUARANTEED**

## [\*Hillary not included.]

SimHealth gives you everything you need to re-make the American health care system—except the First Lady.

A unique new simulation software created by Maxis and brought to you by the Markle Foundation, SimHealth elects you leader. Now you can build a health policy in tune with your values, and watch it in action on a virtual "Main Street." Will you be re-elected? You'll certainly be more engaged, entertained and educated about our national debate than you ever thought possible. So why not give us a call? Because at \$29.95—that's 25% off retail—SimHealth is just what the doctor ordered.



**1-800-U-CHANGE**  
 1-800-824-2643



Mail orders: SimHealth, PO Box 2096, Woodinville, WA 98072-2096.  
 Requires an IBM or 100% compatible with DOS, a 386 microprocessor or greater, and a 256-color SVGA.

Circle Reader Service Number 206

## REVIEWS

cache will be constantly flushed with new information, and therefore offer little benefit. Folks who use CD-based encyclopedias and other reference works, Photo-CD discs, and clip-art discs will see a more dramatic speed-up than gamers. A game might seem a little snappier, but an encyclopedia search may go from 10 seconds to less than a second on subsequent accesses.

The manual does a good job of explaining the program's many command line parameters and configuration nuances. Besides speeding CDs, the program can also cache hard disks and floppy drives. Available options include a handy write-delay feature, memory lending, performance reports, write protection, and the ability to read ahead a user-defined number of sectors. This last feature is particularly useful for full-motion video.

The program performs flawlessly under both DOS and Windows, but doesn't support OS/2. The biggest problem most veteran users will encounter is simply finding room in the system configuration for another TSR. If your system has room, you can load the program entirely into upper memory.

No disk-caching program will magically transform a slow CD-ROM drive into a speed demon, nor will it perform similar miracles on slow video cards and ancient CPUs. For those with reasonable expectations, however, Lightning CD offers immediate rewards.

SCOTT A. MAY

LUCID  
 (800) 967-5550  
 \$79.95

Circle Reader Service Number 450

## BASEBALL FOR WINDOWS

Don't be alarmed: The sound of breaking glass you hear is merely another barrier broken in the field of Windows-based entertainment software. Miller Associates' Baseball for Windows, improved from the best-selling DOS version, is stunning in its scope and quality of presentation, setting a new standard for strategy sports games.

The program incorporates four distinct modules: Baseball (the game itself), Advanced Draft, League Manager, and StatMaster. The action is purely statistical yet still manages to stir considerable excitement with optional real-time play management and press-box play-by-play. Adding to the overall ambience are several handsomely ren-

dered 16- or 256-color ballpark background graphics.

Managerial, coaching, and statistical reporting features are overwhelming and simply too numerous to mention. Suffice it to say that every aspect of professional baseball, no matter how large or small, is here—from spring training to postseason. The program comes with three Old Timer team col-



*This game proves Windows is good for more than puzzle and card games.*

lections and is compatible with more than 50 season disks available by the publisher.

Multitasking allows you to play two games simultaneously or manage league affairs while a game plays in the background. The computing price is a bit steep, requiring at least 3MB RAM and a fast CPU (a 386 running at 20 MHz is the bare minimum; a 486 is great). It's power well spent, however—for hardcore baseball fans, it doesn't get any better than this.

SCOTT A. MAY

Miller Associates  
 (800) 654-5472  
 \$69.95

Circle Reader Service Number 451

## B.A.B.Y.

If you're interested in starting a family or if you're expecting a child in the near future, you might find B.A.B.Y.: Birth and Baby Years to be a fun and informative way to pass the time before the birth of your baby and after your child is born.

The program starts with information on fertility and conception, analyzing your menstrual schedule to determine and graph peak days of fertility. Once you've found out you're pregnant, it's simple to get to the Timetable box and type in the date of your last menstruation. Instantly, the program calculates the dates for the beginning of each of the three trimesters, tells you how many days into the pregnancy you are and how many days are left and gives you your due date.

Once the dates are established,

[www.commodore.ca](http://www.commodore.ca)

Free Spirit

CD-ROM Software



1-800-638-5757

Mon - Fri: 8am - 9pm Sat: 7:30am - 7:30pm Sun: 9am - 7:30pm EST



International Orders: (317) 878-4738 FAX Orders: (317) 878-4751

# Chestnut

**Bibles & Religion** - New & Old Testaments, study guides, covers Judaism, Christianity, Islam  
**Clipart Goliath** - Thousands of images for all uses, in PCX & TIFF format! For DTP programs  
**Encyclopedia of Sound** - Over 250 sound files by the Music Factory in WAV format  
**Complete Bookshop** - An entire bookshop. Includes: classics, poetry, humor, history, more!  
**Deathstar Arcade Battles** - Exciting VGA space wars, shoot-em-ups, sports, & more!  
**Dictionaries & Language** - Dictionaries, thesaurus, word proc, style/spell checkers, foreign languages  
**HAM Radio v3.0** - Packet radio, satellite, freq lists, service, mods, SSTV, FCC regs, exams, more!  
**Our Solar System** - Exciting NASA photos & planetarium programs, star/planet locators  
**Shareware Overload!** - 600MB, all kinds of applications, ZIPPED! Lots of Windows prog's, & games  
**Sound Sensations!** - Sound Effects, voices, music, utils, for AdLib & SoundBlaster, & other cards  
**TechnoTools** - C/C++, Basic, dBase, networking, Unix, OS/2, Windows, assembly, Pascal, more!  
**Too Many Typofonts** - Countless typofonts in ATM, TrueType, Ghostscript, HP Laser, and more.  
**Windowware** - Utilities, wallpaper, education, icons, font installers, games, and more for Windows.  
**World Traveler** - Photos by Michael McGrath & Paul Elmendorf in PCX and GIF format

**NEW! Chesnut CD-ROM Titles**  
**Legal Guide** - 500 legal forms from the authors of BBS Legal Guide  
**Gardening** - Handbook for the home gardener with layout, planting instructions, etc.  
**Computer Reference Library** - Step-by-step hardware and software tutorials.

## CD-ROM Hardware

**CD-ROM Drives**

- Mitsumi CD-ROM HH Internal 169.00
- Textel DM3024 (drive only) 359.00
- Toshiba XM-3401B (drive only) 379.00

**Sound Boards**

- Pro Audio Spectrum 16 169.00
- Sound Blaster Deluxe 89.00
- SoundBlaster Pro 119.00
- Soundblaster 16 ASP 209.00

**CD Caddies**  
**Sony Type \$5.00**

- \$639 Intellect CD16 + MediaVision PAS16SCSI + Speakers + 1 Software Bundle
  - \$599 Illuminate CD16+ MediaVision PAS16SCSI + Speakers + 1 Software Bundle
  - \$529 Lumina CD16 + MediaVision PAS16SCSI + Speakers + 1 Software Bundle
  - \$499 Educate CD16 + MediaVision PAS16LM + Speakers + 1 Software Bundle
- Featuring Sony, Toshiba, Texel, Phillips LMSI, and Teac CD-ROM Drives  
 CD-Format : Audio-Combined, Mode 1 & 2 Data Discs, CD-Audio Discs, CD-ROM XA (pictures).  
 Audio compatibility: MPC and MS Windows with MultiMedia, AdLib, Sound Blaster, & Real Sound.

- Software for Bundles Above (Please order by number)
- MPC Software Toolworks Encyclopedia (Grolier's), MPC US Atlas, MPC World Atlas, MPC The Animals!, MPC Guinness Book Of World Records (1993)
  - MPC Software Toolworks Encyclopedia (Grolier's), MPC US Atlas, MPC World Atlas, MPC The Animals!, Reference Library
  - MPC Software Toolworks Encyclopedia (Grolier's), MPC US Atlas, MPC World Atlas, MPC Mavis Beacon Teaches Typing, MPC ChessMaster 3000
  - The Secrets of Monkey Island (5 Languages), Sport's Best(3 games, 4 languages), MPC Wizard, CICA Windows Programs & Utilities, Jets and Props, World View
  - The Secrets of Monkey Island (5 Languages), Sport's Best(3 games, 4 languages), Languages Of the World (Windows), CICA Windows Programs & Utilities, Kodak

Over 1000 CD-ROM Software Titles in Stock!

Business	Education	Entertainment	Reference	Shareware
Am Business Ph Bk 93-94 29.00	Mother Earth 2 33.00	Seventh Guest 45.00	Resource Library Audio 14.00	ASP Advantage 24.00
Business Lists-on-disc 39.00	Mother of All Clip Art 12.00	Sherlock Cons 1 15.00	Sound Effects Library 15.00	All American M/M Shwre 19.00
Business Tools 19.00	Nautilus Best of Photography 19.00	Sherlock Cons 2 18.00	Sounds for Windows 42.00	Amsoft World Ham Radio V2 29.00
Business Library V1 45.00	Pixel Perfect 15.00	Sherlock Cons 3 39.00	SoundWAV 49.00	California Collection 12.00
Business Master 15.00	Publishers Paradise 19.00	Space Quest IV 19.00	Vivaldi 15.00	CICA Windows 29.00
Career Opportunities 25.00	Publish it 2.0 (DOS) 15.00	Sporting News Pro Ftblab Gd 45.00	Win CD 35.00	Doctor of Games 14.00
Essential Home & Bus Coll 12.00	Quicktoons 54.00	Stellar 7 35.00	Programing 15.00	Doctor of Shwreware 14.00
Home Office Software 30.00	Quickestons 19.00	Strike Commander w/Tact M 18.00	ADA Programming 19.00	Doctor of Windows 14.00
Intr'l Bk & Econ Atlas 15.00	Reel Clips 24.00	Wacky Funster 39.00	C Users Group Lib 19.00	Gigabyte Gold 29.00
M Beacon Teaches Typing 19.00	Resource Library Graphics 14.00	Who Killed Sam Rupert? 49.00	Garbo 12.00	Hacker Chronicles 24.00
Microsoft Works 35.00	So Much Screenware 25.00	Willy Beamish 49.00	Hobbes OS/2 13.00	Programmers ROM 47.00
My Advncd Label Designer 39.00	Space, Time & Art 64.00	Wing CDR 2/Sec Missions 49.00	Programmers ROM 47.00	Resource Lib Lang Operations 19.00
9 Digit Zip Code Directory 25.00	Tempra Access 12.00	Wrath of the Demon 39.00	Resource Lib Lang Operations 19.00	Simtel 20 13.00
North American Fax Book 25.00	Quicktoons 19.00	Aesops Fables 55.00	Simtel 20 13.00	Monster Media '93 29.00
PhoneDisc USA Business 69.00	Conquest of the Longbow 24.00	Beauty & the Beast 15.00	Source C CD 59.00	Night Owl 10 29.00
PhoneDisc USA Residential 79.00	Curse of Enchantia 14.00	Desktop Bookshop 19.00	Sprite 25.00	Original Shwreware 9.00
Pro Phone 1993 Mid-Year 119.00	Cybergenic Ranger 25.00	Electronic Home Library 24.00	X11R5/GNU 25.00	PC SIG 12 15.00
Pro Phone Business 1993 Q & A 29.00	D & D Fantasy Empire 64.00	Greatest Books Collection 15.00	Phoenix 4.0 15.00	Phoenix 4.0 15.00
Secrets Executive Success 29.00	Dracula Unleashed 12.00	Hound of Baskerville 39.00	Reference 15.00	PowerPak Gold 18.00
	Dune 35.00	Interactive Storytime V1 19.00	Aircraft Encyclopedia 39.00	RBS in a Box 25.00
	EcoQuest 59.00	Interactive Storytime V2 15.00	Bible Library 49.00	Shwreware '93 24.00
	Erie the Unready 12.00	Interactive Storytime V3 18.00	Cinemaia 18.00	Shwre Explorer Quad Pak 59.00
	Eye of the Beholder 3 15.00	Interactive Storytime V4 18.00	Compton Upgrade & Switch 30.00	Shwre Extravaganza (4 disks) 39.00
	F-117A Stealth Fighter 15.00	King's Quest 5 15.00	Consumer Information 14.00	Shwreware Heaven 14.00
	F-15 Strike Eagle III 25.00	King's Quest 6 34.00	Cookbook Heaven 14.00	Software Vault 1 12.00
	Fatty Bear's Birthday Surp. 39.00	King's Quest 7 34.00	Dict Living World 24.00	Software Vault 2 14.00
	Fatty Bear's Fun Pack 30.00	Links Collectors 39.00	Encyc Win 1.0/Dos 5.0, S.T. 39.00	Software Vault Gold Coll. 19.00
	Flight 642 18.00	Legend of Kyrandia 45.00	Family Doctor 35.00	So Much Shwreware 2 15.00
	Funny (Jokes CD) 18.00	Loom 40.00	Great Naval Battles 15.00	So Much Shwreware 3 19.00
	Game Master 25.00	Lord of the Rings 49.00	Guinness 1993 18.00	Top 200+ Shwre 19.00
	Game Pack II 17.00	Mantle 49.00	Health & Medical Directory 18.00	Ultimate Shwre Coll 12.00
	Games 1993 14.00	Mad Dog McCree 45.00	History of the World 36.00	Up All Night 15.00
	Gameware Collection 14.00	Maniac Mansion: Day Tntle 40.00	Holy Bible & Christian Shwre 39.00	Window Master 18.00
	Gunship 2000 104.00	Mantis 25.00	Home Designer DOS/WIN 25.00	Windows 1993 24.00
	Guy Spy 19.00	Martian 15.00	Illus Facts:How Things Wrk 15.00	Windows Shwreware Gold 18.00
	House of Games 19.00	Martian 15.00	Illus Facts:How World Wrks 19.00	WIN Platinum 14.00
	Inca 49.00	Music & Sound 15.00	JS New Prague Cookbook 35.00	Zippack 12.00
	Indiana Jones Fate Atlantis 49.00	0001 Utilities 24.00	King James Bible 14.00	Travel 19.00
	Jones in Fast Lane 24.00	CD Speedway 39.00	Languages of World 57.00	Adventures 34.00
	Jutland 24.00	Jeweling Cases 45.00	M S Bookshelf 93 1.00	Aloha Hawaii 19.00
	King's Quest 5 15.00	Light 51.00	Map Expert w/Str AtlasUSA 59.00	Britain at its Best 19.00
	King's Quest VI 39.00	Nautilus Bac Pac V1 49.00	Mayo Clinic 39.00	Digital Tours/USA Tours 29.00
	King's Quest VII 34.00	Nautilus Bac Pac V2 29.00	Microsoft Encarta 39.00	Global Explorer 89.00
	King's Quest VIII 34.00	Nautilus Mini Subscription 45.00	M/M Animals Encyclopedia 24.00	Great Cities V1 or V2 19.00
	King's Quest IX 34.00	Romware Magazine 40.00	Murmurs of Earth 12.00	Great Wonders World 29.00
	King's Quest X 34.00	PC Medic 15.00	Oxford English Ref Lib 15.00	Hong Kong At its Best 19.00
	King's Quest XI 34.00	PC Gameroom 25.00	Plant Doctor 27.00	Hospitality Index 25.00
	King's Quest XII 34.00	PC SIG Games 29.00	Prescript. Drugs 19.00	National Parks 19.00
	King's Quest XIII 34.00	PC SIG World of Games 12.00	Reference Lib. S.T. 25.00	New York at its Best 19.00
	King's Quest XIV 34.00	Pentomino 65.00	Tony LaRussa Baseball 2 19.00	The Orient 39.00
	King's Quest XV 34.00	Putt Putt Joins the Parade 54.00	Total Baseball 1993 34.00	Street Atlas USA 89.00
	King's Quest XVI 34.00	REBEL ASSAULT 12.00	USA State Factbook 49.00	US Atlas w Automap 29.00
	King's Quest XVII 34.00	Sci-Fi Fantasy 24.00	USA Wars: Civil War 12.00	Washington at it's Best 19.00
	King's Quest XVIII 34.00	Scotter's Magic Castle 54.00	USA Wars: Korea 15.00	World Atlas 4.0 22.00
	King's Quest XIX 34.00	Scrabble Deluxe 29.00	USA Wars: WW2 55.00	World Atlas US/Atlas Combo 19.00
	King's Quest XX 34.00	Secret 1 Luftwaffe 25.00	USA Wars: Vietnam 55.00	World Vista 25.00
	King's Quest XXI 34.00	Secret Monkey Island 22.00	US History 55.00	World Vista 25.00
	King's Quest XXII 34.00	Scrabble Deluxe 29.00	World Factbook 25.00	Many more titles available (including Adult)

Order with Check, Money Order, Discover, VISA, MasterCard, American Express, or COD. Order by phone, mail, or fax. There is no surcharge for credit card orders. For the contiguous U.S., CD-ROM software shipping is \$5.00 per order (not title), or \$9.50 if COD. Alaska, Hawaii, Puerto Rico, Mexico and Canada add \$8.00 per CD-ROM software order for shipping. Costs for shipping hardware, or orders to foreign countries not mentioned, are quoted at time of order. Indiana residents add 5% sales tax. Not responsible for typographical errors. Please research your product purchases as all sales are final. All products are covered by manufacturer's warranty. Prices and availability are subject to change without notice.

Free Spirit Software, Inc. - PO Box 158 - 109 W Pearl Street - Trafalgar, IN 46181 Phone (317) 878-5348

www.commodore.ca

you'll be able to take a week-by-week look at your baby's development. You can view animated displays of the changes your body will go through, and you can read in detail how your baby is developing, how much it probably weighs, and how large it is in inches.

B.A.B.Y. also covers diet, exercise, and childbirth classes. For instance, under the Pregnancy Menu, the Tracker option graphs your weight gain/loss for you. Simply type in your weight each week. The software calculates what your caloric intake should be based on your prepregnancy weight. Then B.A.B.Y. gives diagrams of good prenatal exercises and provides a calendar to keep track of your childbirth classes.

As your due date approaches, you'll want to check out the phases of labor and the animated delivery sequence. You'll learn what you might experience in recovery and what tests your newborn will undergo and what the results mean.

Most expectant parents will find the views of the baby's stages of development fascinating. Some features are more useful than others, however. Discovering your baby's due date is exciting and fun, but attempting to schedule your newborn's feeding times (is there such a thing?) may be impossible. B.A.B.Y.: Birth and Baby Years is a fun and informative way to track fertility and pregnancy, even if you're too busy after the baby is born to take advantage of its other features.

PAM PLAUT

Software Marketing  
(602) 893-3377  
\$59.95

Circle Reader Service Number 452

## ICON MAKE-IT

Thanks to the efforts of third-party software makers, the Windows environment is slowly loosening up and having fun. Moon Valley Software's Icon Make-It is a perfect example. The program puts you in the director's chair of

The editor interfaces directly with the animation studio, where you script your movies with up to 20 icon frames using VCR-style controls, variable-speed playback, and a preview screen. Choose from 19 special visual effects such as zoom, dissolve, shatter,

emotion Development.

Icon Make-It's greatest limitation is its incompatibility with shells other than Windows' Program Manager. It has limited success with Norton Desktop—animated icons must be reloaded with each new Windows session—and it doesn't work at all with such proprietary shells as Vitesse's Salvation. These are problems Moon Valley should quickly address, since alternative Windows shells are becoming more popular.

While it may not improve your productivity, Icon Make-It is undeniably fun to play with and adds some needed motion to a static Windows workplace.

SCOTT A. MAY

Moon Valley Software  
(800) 473-5509  
(602) 375-9502  
\$69.95

Circle Reader Service Number 453



Moon Valley's Icon Make-It puts you in the director's chair of a full-featured Windows icon animation studio.

a full-featured icon animation studio.

Like a mini movie studio, the program is divided into several modules, each specializing in various stages of production. Visit the icon editor to design your own 16-color creations on a 32- x 32-pixel grid, or import 1 of the 200 icons from the built-in clip art book. You can create or modify icons with a full set of standard drawing tools plus effects such as image shifting, borders, and frame advance. You can also create animated cursors, but I found them to be more annoying than entertaining.

melt, colorize, rotate, mirror, and paint. Still want more? Try combining two movies—one in the foreground and another in the background—for a complex, multilayered effect.

Once assembled and recorded, animated icons are easily assigned to programs via a scaled-down version of Moon Valley's Icon Hear-It, which allows you to attach sound samples to your icons. Also included is a handy working demo of MCS Stereo Digital Recorder, a component-style Windows WAV sound recorder, player, and editor from An-

## WAYNE'S WORLD

Wayne's World is excellent! NOT!

Then again, it didn't make me want to blow chunks, either.

This graphic adventure from Capstone uses an updated version of the game system used in the company's The Dark Half. It finds Wayne and Garth setting up a pizzathon to raise \$50,000 to prevent the Community Access Television station which airs their Mom's-base-ment talk show from going off the air.

No way! As if anything built on the same engine as The Dark Half could be good, dude. Way! Wayne's World really is not all that bad. You can switch between these two dubious cultural icons. The interface now has a series of icons fea-

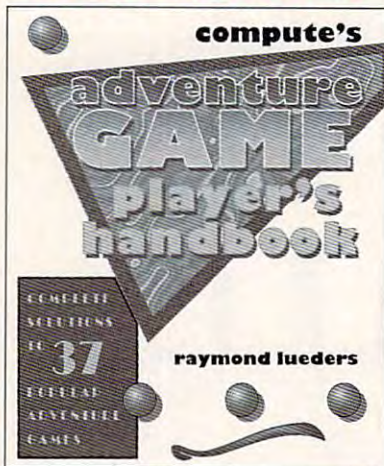
# PREPARE



**NEW WORLD COMPUTING, INC.**  
1-800-325-8898

 [www.commodore.ca](http://www.commodore.ca)

## THE ULTIMATE GUIDE TO ADVENTURE GAMES



Includes thousands of hints and tips and more than 300 game snapshots, digitized images, and maps. 500+ pages.

**Alone in the Dark**  
**Amazon**  
**Conquests of the Longbow**  
**The Dagger of Amon Ra**  
**Dark Seed**  
**EcoQuest**  
**Fred the Unready**  
**Freddy Pharkas**  
**Gobliins 2**  
**Heart of China**  
**Inca**  
**Indiana Jones**  
**King's Quest V**  
**King's Quest VI**  
**Leather Goddesses of Phobos 2**  
**The Legend of Kyrandia**  
**Leisure Suit Larry V**  
**Les Manley in: Lost in L.A.**  
**The Lost Files of Sherlock Holmes**  
**Lost Secret of the Rainforest**  
**Martian Memorandum**  
**Mixed-Up Fairy Tales**  
**Monkey Island 2**  
**Police Quest 3**  
**The Prophecy**  
**Quest for Glory III**  
**Rex Nebular**  
**Ringworld**  
**Rise of the Dragon**  
**The 7th Guest**  
**Space Quest IV**  
**Space Quest V**  
**Spellcasting 301**  
**Star Trek**  
**Ultima Underworld**  
**Ultima Underworld 2**  
**Willy Beamish**

To order your copy send \$21.95 plus \$2.50 for shipping and handling (U.S., \$4 to Canada and \$6 other) to COMPUTE Books, c/o CCC, 2500 McClellan Ave. Pennsauken, NJ 08109. (Residents of NC, NJ, and NY please add appropriate tax; Canadian orders add 7% goods and services Tax.) All orders must be paid in U.S. funds drawn on a U.S. bank. Orders will be shipped via UPS Ground Service. Offer good while supplies last.

## REVIEWS

turing their goofy faces. You can make either of the two the active character. Capstone even added an Extreme Closeup! command. The map mechanism is a delightful computery thing. The game sets up the quests nicely right at the outset. Samples from the movie, such as "ex-squeeze me?" surface here and there.

I mean, what else do you want? This isn't the most ambitious game around. The graphics aren't too fancy. The intro's rather crude. There's no pretense here of doing anything but having fun, and Wayne's World is rather good at that.

And, happily, Capstone doesn't seem to have sanitized the material at all, so the richly stupid humor of Wayne and Garth comes through from the get-go. Anyone who saw and enjoyed the movie will doubtlessly get some fun out of this. Everyone else: Just party on.

PETER OLAFSON

Capstone  
(800) 468-7226  
\$49.95

Circle Reader Service Number 454

## MEGA-LO-MANIA

What traits are most important in a computer-game god? Good judgment? Perhaps unquestioning benevolence? No, a powerful cybernetic deity is only a deity at all because he or she can and will conquer unbelievers by mashing the poor pawns into submission. If a deft crunch-fest is what you're in the mood for, Mega-lo-Mania might provide just the tonic you need.

Set against a backdrop of sweeping space, a young planet is born, populated with primitive human life which is in serious need of some guidance. Enter a rough-and-tumble bunch of deities, each wanting the world for his or her own. So how is the decision made? By war of course, using the malleable and glibble humans as pawns.

You start the game by choosing one of four rival deities, and you must battle through 27 islands of conflict, until the 28th, the "mother of battles" is reached. If you emerge victorious, you're given dominion over the planet.

The islands are played in sets of three, with each set representing an epoch of time. You start play in the Stone Age and end with nuclear and spaceflight technology. For each battle you're allocated a pool of men from the bank, 100 per epoch (but more may be accumulated by underpopulating the lower level conflicts and bringing

the balance forward). Choose a home sector, and you're ready to go off to fight some battles.

Each island varies in size, terrain type, and which enemy deities must be tackled. To win, you must completely wipe out the men your rival deity controls. You've got to use your men, the natural resources in your sector, and your tactical acumen to design and implement successful defensive and offensive capabilities.

The earliest battles are fairly easy: It's easy enough to research the rock weapon and set up an all-offensive force that will go out and hurl rocks at your opponent's fortifications. In the later epochs, resource management and defensive posturing become important. But you shouldn't forget that he who throws the first rock usually wins.

Mega-lo-Mania is an attractive game with a rather obtuse icon interface. Once you master the icons (with little help from an exceptionally poor and hard-to-read manual), the game plays very smoothly.

Unfortunately, Mega-lo-Mania isn't the strategic challenge it first appears to be. Basically, being the first to develop weapons and deploy them is tantamount to invincibility. To be first, you must have your strategy figured out before the play for a given island begins. The speed of weapon development is dictated by two things: manpower and resources. Manpower is under direct player control, but the resource-generating ability of a sector is only discovered during actual play. A dry-run peek at a sector will tell at a glance whether it will perform well or not, and if not, quitting the sector and moving on isn't a bad option.

In a strange quirk of blindness during development, Ubi Soft neglected to factor in any way to leave the game—you can't quit back to DOS! Your only option is to reboot the computer to escape the crazed god-struggle of the nether universe.

While Mega-lo-Mania suffers from a lack of depth and sloppy quality control, the game does offer an interesting gaming experience. Perhaps my favorite aspect of the game is the varying tech levels which can be present at any one time: You can make a biplane attack on a castle defended with archers, and you may be forced to use catapults to fend off an incoming jet fighter. As a nonbenevolent, no-brainer game, Mega-lo-Mania delivers.

PAUL SCHUYTEMA

Ubi Soft  
(415) 332-5011  
\$49.95

Circle Reader Service Number 455

[www.commodore.ca](http://www.commodore.ca)



# DC

## DISK-COUNT SOFTWARE

Lowest delivered prices with great customer service.

# 800-448-6658

HOURS: M-F 9 AM-8 PM SAT 10 AM-3 PM EST

PRODUCT INFO & OTHER BUSINESS: 908-396-8880



NO SURCHARGE  
SHIPPING IS ONLY \$4.00  
PER ORDER, NOT PER  
ITEM

HARDWARE INCLUDED!!!

CD ROM		SOFTWARE		CD DRIVES		Joysticks		Multimedia	
Aegis Guardian 49 <sup>95</sup>	Loom 39	A Train 39	Computer Works 46 <sup>95</sup>	Rescue Air 911 17	Lost Treas Infocom 42	CH Flightstick 37 <sup>95</sup>	Aitech	Audio Show 369	Strip Poker 3 32
Aesops Fables 33	Lost Treasure 49	Construction Set 22	Cohort 2 19 <sup>95</sup>	San Francisco 29 <sup>95</sup>	Lost Treasures 2 29 <sup>95</sup>	CH Game Card 3 31	Audio Show 369	Data Disk (ea) 17	Stardust 3 32
Aladdin Lamp 33 <sup>95</sup>	MacMillan Child Dict 49	Across the Rhine 47 <sup>95</sup>	Conquest of Japan 35 <sup>95</sup>	Scenery St A or B 37	Lost Vikings 29 <sup>95</sup>	CH Mach 3 28 <sup>95</sup>	Pro 256 280	Stronghold 37 <sup>95</sup>	Strip Poker 3 32
Alone in the Dark 45	Mad Dog McCreo 32 <sup>95</sup>	Aces Over Europe 44 <sup>95</sup>	Crusader Drk Savnt 39 <sup>95</sup>	Scenery Enhn Ed 25	Maelstrom 39 <sup>95</sup>	CH Virtual Pilot 65	Pro Color Plus 529	Studyware for ACT 30	Strip Poker 3 32
Amer Bus. Phnbk. 39	Man Enough 45 <sup>95</sup>	Aces of the Pacific 42 <sup>95</sup>	Cuckoo Zoo 31 <sup>95</sup>	Sound & Graphic 25	Maniac Mansion II 35 <sup>95</sup>	Eliminator Card 26	Pro VGA/TV 459	Studyware for Biology 30	Strip Poker 3 32
Arthur Teacher Trbl 41	Manhole 49	Mission Disk 19 <sup>95</sup>	Cyber Space 34 <sup>95</sup>	Tahiti 19	Mantis 39	Gravis Analog Pro 39	Pro PC/TV Plus 249 <sup>95</sup>	Studyware for Calc., Chem., Econ., 25	Strip Poker 3 32
Autodesk Explorer 119	Manic Mansion 39 <sup>95</sup>	AD&D Collect 2 42 <sup>95</sup>	Darklands 37 <sup>95</sup>	Washington DC 29 <sup>95</sup>	Speech Disk 17	Gravis Joystick 32	Pro VGA/TV + 659	Studyware for Physics, Statistic 25	Strip Poker 3 32
Barney Bear Goes 26	Mantis 45 <sup>95</sup>	AD&D Starter Kit 42 <sup>95</sup>	Darkseed 39	West USA Scry 39 <sup>95</sup>	Mario is Missing 35 <sup>95</sup>	Gravis PC Game Pad 21	VideoSurge 659	Studyware for LSAT 37	Strip Poker 3 32
into School 26	Mario is Missing 47 <sup>95</sup>	AD&D Unlimited 37 <sup>95</sup>	Darkside of Xeen 39 <sup>95</sup>	West Europe 19	Mario Teach Type 25	Kidz Mouse 30 <sup>95</sup>	VideoSurg SVHS 729	Syndicate 37 <sup>95</sup>	Strip Poker 3 32
into Space 26	Mavis Beacon 39	Aidbou&Junior #1 34 <sup>95</sup>	Dark Sun 47 <sup>95</sup>	Freddy Pharkas 39 <sup>95</sup>	Mano of Orion 37 <sup>95</sup>	Kraft KC3 Joystick 28	Wave Watcher 419	Take a break X-Word 29	Strip Poker 3 32
Battlechess 34	Mayo Clinic 49	Air Bucks 34 <sup>95</sup>	Daughter of Serpnt 31 <sup>95</sup>	Front Page Pro 45 <sup>95</sup>	Math Blaster Plus 29 <sup>95</sup>	Maxx Flight Yoke 69	Wave Watcher 419	Task Force 1942 37 <sup>95</sup>	Strip Poker 3 32
Beauty & Beast 49	Monarch Notes 75	Air Bus A320 45 <sup>95</sup>	Deja Vu 1 & 2 37 <sup>95</sup>	Fun School: Freddy Frog 29 <sup>95</sup>	Math Blaster 39 <sup>95</sup>	Maxx Pad 39	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Beethoven Ninth 59	Monkey Island 39	Air Duel 33 <sup>95</sup>	Design your Railrd. 35	Sam Spy, Teddy Br 17	Mystery 29 <sup>95</sup>	Quickshot Game Cd 14	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Beritz Think & Talk 105	MM Music: Mozart 33	Air Force 39 <sup>95</sup>	Detroit 35 <sup>95</sup>	Sam Spy, Teddy Br 17	Search of Spot 35 <sup>95</sup>	Quickshot Warrior 18	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
French 105	MM Music: Vivaldi 33	Air Warrior SVGA 35 <sup>95</sup>	Diet Pro DOS/Win25/36 42 <sup>95</sup>	Search of Spot 35 <sup>95</sup>	Speech Disk 17	Suncum Command 19 <sup>95</sup>	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Spanish 105	Our Solar System 29	Air World Discry 29 <sup>95</sup>	Dino Park 35 <sup>95</sup>	Speech Disk 17	Math Blaster Wind 36	Thrustmaster 69	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Bloodnet 41 <sup>95</sup>	Penthouse Interact 79 <sup>95</sup>	AlgeBlaster Plus 30 <sup>95</sup>	Dino Quest 31 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Blue Force 39 <sup>95</sup>	Pool Shark 1 <sup>95</sup>	Alone in the Dark 35 <sup>95</sup>	Dinosaur Adventure 34	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Buzz Aldrin Race 59	Precision Map 84 <sup>95</sup>	Alphabet Blocks 29 <sup>95</sup>	Discovering Amer 35 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Carmen World Dixe 65	Protostar 39 <sup>95</sup>	Amazon 38 <sup>95</sup>	Distant Sun 39 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Cautious Condor 45	Rebel Assault 39 <sup>95</sup>	Amazon Trail 34 <sup>95</sup>	Dog Fight 37 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
C D Game Pack 55	Reference Library 59	Ambush 37 <sup>95</sup>	Doom! 42 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
C D Speedway 57	Return of Phantom 37 <sup>95</sup>	Ancient Art War Sky 35	Dr Floyd Desktop 19 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Chess Maniac 34 <sup>95</sup>	Return to Zork 45 <sup>95</sup>	Animal Empires 30 <sup>95</sup>	Dr Jam Window 59 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Christmas Carol 33	Rotor/Airball/Time 25	Animal Adventure 47 <sup>95</sup>	Dr. Quandy 31	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Clipart Goliath 30	San Diego Zoo 49	Animation Studio 75	Dragon Knight III 45 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Conan Cimerion 36	Science Advnt II 47 <sup>95</sup>	Animation Studio 75	Dragon Lair 3 49 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Conan Cimerion 36	Secret Weapons 59	Animation Studio 75	Dreadnoughts 40 <sup>95</sup>	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Creative Kids 36 <sup>95</sup>	Seventh Guest 59	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Curse of Enchantia 25 <sup>95</sup>	Sherlock Holmes 39	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Dark Sun 49 <sup>95</sup>	Sherlock Holmes 2 42	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Deathstar Arcade 30	Sherlock Holmes 3 49	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Dictionaries & Lang 30	Sleeping Beauty 37	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Dracula Unleashed 49 <sup>95</sup>	Sound Works 35	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Dune 45 <sup>95</sup>	Space Quest 4 37	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Education Master 37	Space Series-Apollo 49	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Electronic Cookbook 75	Space Shuttle 29 <sup>95</sup>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Elect. Home Library 49	Spellcasting Party 29 <sup>95</sup>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Encarta Encyclpd 249 <sup>95</sup>	Star of Excalibur 37	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
F-15 39 <sup>95</sup>	Star Trek Enhanced 49	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
F-117A 43 <sup>95</sup>	Stellar 7 30	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Family Doctor 39	Strange Deadfellow 39	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Fatty Bear 43 <sup>95</sup>	Street Atlas 89 <sup>95</sup>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
G Force 19 <sup>95</sup>	Strike Commandr 57	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Gateway II 35 <sup>95</sup>	Talking Classic Tale 75	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Geekwad Games 22 <sup>95</sup>	Talking Jungle Safari 75	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Gettysburg-MM Hist 43	Time Table Science 59	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Gofer Winkles Adv 33	Ultimate Shareware 59	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Golden Immortal 28	USA Wars: Civil War 49	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Gunship 2000 37 <sup>95</sup>	USA Wars: Korea 49	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Guy Spy 32	USA Wars: Vietnam 49	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Hell Cab 62 <sup>95</sup>	USA Wars: WW II 49	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Hi Tech Aircraft 42 <sup>95</sup>	Voyage Planet ea 69	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Humans 25 <sup>95</sup>	Who Kill Sam Rup 25	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Inca 35 <sup>95</sup>	Wily Beemish 37	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Indiana Jones 39 <sup>95</sup>	Win CD 32	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Inspector Gadget 37 <sup>95</sup>	Wing Comm & Miss 45	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Interactive Old Test 52	Wing Comm/Ultima 6 45	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Intro Games Fr/S 79	Wing Comm 2 57	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Iron Helex 59 <sup>95</sup>	W C 2/Ulti. Underw 57	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Its a Wonderful Life 48	Wolfpack 37 <sup>95</sup>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Jazz: Multimedia Hist 69	World War II Pak 37 <sup>95</sup>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Jets & Props 55	<b>Adults Only-21 Yrs.</b>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Jones in Fast Lane 37	Animation Fantasy 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Just Grandma & Me 36	PC Pix Vol 1 or 2 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Jutland 44 <sup>95</sup>	Portware 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
King Quest 6 26 <sup>95</sup>	Private Collection 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Land Of Lore 34 <sup>95</sup>	Priv. Pictures 1 or 2 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Languages of World 99	Seedy Vol 1-7 ea. 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Learn to Speak Spn 59	Storm 1 or 2 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Leisure Suit Larry 37	Visual Fantasy 65	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Liby of Art: Renais 65	Caddies 7.95ea. 3/\$ 19	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
SB Portblaster 149	SB Video Blaster 349	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
SB Video Spigot 419 <sup>95</sup>	SB Wavestral 179 <sup>95</sup>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
Roland RAP-10 459 <sup>95</sup>	SCC-1 GS 375	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
SC-7 315	SC-55 549 <sup>95</sup>	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>	FCS Pro 109	Wave Watcher 419	Terminator Rampage 39 <sup>95</sup>	Strip Poker 3 32
SC-55 549 <sup>95</sup>	MA-12C ea 105	Animation Studio 75	Dune 2 36	Speech Disk 17	Math Rabbit 29 <sup>95</sup>				

## REVIEWS

### DAUPHIN DTR-1

The Dauphin DTR-1 (Desktop Replacement-1) is about 50 percent PDA and 50 percent laptop. It comes with Pen Windows and the Ascend personal information manager built in, along with a special spreadsheet optimized for pen use and a group of demonstration programs to show how the system could make itself indispensable for a doctor, nurse, or public safety officer.

The system boasts a 25-MHz 486SLC CPU, 4MB of RAM (expandable to 6MB), and a 40MB hard disk (expanded by DoubleSpace to 73MB). The 5- x 9-inch case sports a pen-sensitive backlit passive-matrix monochrome VGA display (640 x 480), a video output port (800 x 600 with 256-color Super VGA), parallel and serial ports, and a Hayes-compatible modem (the modem and serial port are set to the same interrupt, so they can't be used simultaneously). There's also an Ethernet connector, but while the connector is standard, the Ethernet hardware is not—it's an option that you have to order separately for around \$300. The keyboard is in a separate, similar-sized unit (5½ x 9½ inches).

Since the reviewed computer had no floppy drive (an external floppy drive is available from Dauphin for \$199, and external hard disks and removable hard disks will probably be available by the time this appears) nor any PCMCIA slots, all programming and documents must be managed through the modem or through Interlink. The machine can be operated without the keyboard through the use of a special pen, which also serves as a mouse in Windows. Provided applications are set up to make sense of pen input, though my pen input was translated into a Doonesburian gobbledygook that was at first amusing, then troublesome, and finally infuriating. Did I once say that I would carry a pen-based computer someday? Is it too late to eat my words?

Pen input can be made simpler through an onscreen keyboard, but using this keyboard requires phenomenal control because, on the tiny screen, each key is about an eighth of an inch square. So to write this review, I relied on the regular keyboard. Finding it difficult to type on the keyboard because of its size, and wanting to be fair, I asked my wife to give it a try because her hands are about half the size of mine. "Too small," she agreed. Not only that, but it feels funny. The keys are stiff and insensitive, so unless you re-

ally press, driving the keys all the way down, your typing doesn't register.

Even more troublesome than the keyboard is the unit's tendency to crash. It locked up on me three times while I had it, each time when I was using the pen as a mouse in Windows. This might be a software problem with Pen Windows. I wasn't able to figure out what was causing the crashes.

The unit folds up neatly in a zippered plastic case. One might think that having the screen and keyboard separate would be a good idea, but it isn't. The screen flops all over the place, making it difficult to hold on your lap. Even on a desktop, I had to prop the screen up against something and pull the keyboard completely out of the case to type (the zipper gets between you and the space bar). A sort of stand is built into the screen half of the case, so you can prop the screen up if the unit is sitting on a flat, rigid surface. The keyboard is held in its half of the case by Velcro.

The power supply is about the size of an electric shaver, and it's very light—it doesn't get in the way or weigh you down like a lot of external power supplies. The unit will run for two continuous hours on a battery charge without the keyboard attached. If the keyboard is attached, it will run for an hour and a half. A beeper warns you when you're down to about five minutes of battery power.

The stated purpose of the DTR-1 is to replace a deskful of documents and notebooks. It's enough computer to do that, and it represents the state of the art of pen-based computing, but it needs a better keyboard and a way to physically attach the keyboard to the computer. The pen input needs to get smarter before I can see replacing anything with this computer.

ROBERT BIXBY

Dauphin Technology  
(708) 971-3400  
\$3,195

Circle Reader Service Number 456

### WACKY FUNSTERS

What could be more fun than an irreverent send-up of five and a half arcade favorites? The real things, to be perfectly honest. Tsunami's self-described "geekwad's guide to gaming" offers a campy collection of minigames, spoofing such standards as Asteroids, Pong, and Street Fighter. Unfortunately, the designers forgot the first rule of parody: Be as good as the subject you're ridiculing. These caricatures simply can't muster the addictive quality of the original games they're based on.

## COMPUTE

# SPEAK UP!

## WE at COMPUTE

strive to provide you with the latest and most useful home, business, and entertainment computer news and information.

Now we offer the **COMPUTE EDITOR LINE**—a direct link to our editorial staff that lets you truly participate in the shaping of **COMPUTE** magazine.

The **COMPUTE EDITOR LINE** offers a unique opportunity for you to voice your opinion and let our editors know exactly what is on your mind. The **COMPUTE EDITOR LINE** is our way of staying in touch with you and all your informational needs.

We hope to hear from you soon.

# 1-900-285-5239

.95¢ per minute.

PET Inc., Box 166, Hollywood, CA 90078.

Must be 18 or older. Touch-tone phones only.

 [www.commodore.ca](http://www.commodore.ca)



**“You are the photographer while three Penthouse Pets cavort and pose in 30 different situations. No question about it - it’s astounding.”**

Forbes F.Y.I.

**“Finally something that you may have dreamed about.”**

WCBC-TV

**“Users can ask their pets to take off articles of clothing and perform erotic acts.”**

Daily News

**“What will they think of next?”**

Dan Rather, CBS

Find out what the critics are raving about. Experience Penthouse Interactive's Virtual Photo Shoot™. Ninety minutes of full-motion (15 fps), high quality video images. It's so simple. Just snap pictures of your favorite pets and save them to your hard disk. "Develop" them by printing out high-resolution color or B&W copies (depending on your printer). Remember, the sooner you order, the sooner you can stop dreaming and start living the life of a real Penthouse Photographer.

**NOW AVAILABLE IN BOTH PC/WINDOWS® AND MACINTOSH® VERSIONS**

PC/Windows® Requirements: At least a 33MHz 386 with 4mb of RAM running Windows 3.1. A Video card that supports at least 256 colors (8-bit color). 16-bit color is preferred. A sound card, for example a SoundBlaster/Pro 16 or a Pro Audio Spectrum 16. Many modern computers are already equipped with sound cards, so be sure to check your configuration first. An MPC-compatible CD-ROM drive. A double speed drive (300kb/sec) is preferred.

Macintosh® Requirements: Any Macintosh® computer with an 8 bit (or better) color or grayscale display. A minimum of 5 megabytes of RAM running system 6.0.7 or 8 megabytes of RAM running system 7.0 or higher. A CD-ROM drive. A double-speed (300 KByte) drive is preferred. Apple system software 6.0.7 or higher. QuickTime 1.6 and HyperCard 2.1 are included in your PHI CD-ROM.

**Please rush me the Penthouse Interactive CD-ROM:**

\$129.95 + \$4.50 (shipping & handling) x \_\_\_\_\_ = \$ \_\_\_\_\_ Total Orders = \$ \_\_\_\_\_

Name \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Check  Money Order  Visa  Master Card Credit card holders call toll-free 1-800-466-9435

Card Acc't # \_\_\_\_\_ Exp. Date \_\_\_\_\_ Signature \_\_\_\_\_

I certify that I am 18 years or older.

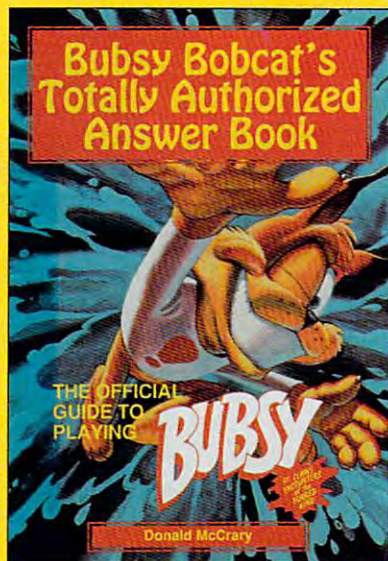
Check one:  PC/Windows  Macintosh

Payment must accompany order. Allow 4-6 weeks for delivery.

U. S. MAIL ORDER: PENTHOUSE VIDEO, INC., P. O. BOX 310173, NEWINGTON, CT, 06111

CO401A

[www.commedore.com](http://www.commedore.com)



# WHOA!

## A BOOK ABOUT BUBSY BOBCAT!

Here's the official guide to both the Sega and SNES game *Bubsy In: Claws Encounters of the Furred Kind*. It's packed with all

kinds of secret stuff you can't find anywhere else—like how to score the most points and find all the secret locations, yarn balls, crates, and other goodies.

Ask for *Bubsy Bobcat's Totally Authorized Answer Book* at your favorite bookstore or computer software store or order direct from COMPUTE by sending \$12.95 plus \$2.00 for shipping and handling (U.S., \$4 to Canada and \$6 other) to COMPUTE Books, c/o CCC, 2500 McClellan Ave., Pennsauken, NJ 08109. (Residents of NC, NJ, and NY please add appropriate tax; Canadian orders add 7% goods and services Tax.) All orders must be paid in U.S. funds drawn on a U.S. bank. Orders will be shipped via UPS Ground Service. Offer good while supplies last.



## The Official Guide to ROGER WILCO SPACE ADVENTURES

### Second Edition

The complete guide to Space Quests I–V. Includes maps, screen shots, and solutions to all five Space Quest adventures.

To order your copy send \$16.95 plus \$2.50 for shipping and handling (U.S., \$4 to Canada and \$6 other) to COMPUTE Books, c/o CCC, 2500 McClellan Ave., Pennsauken, NJ 08109. (Residents of NC, NJ, and NY please add appropriate tax; Canadian orders add 7% Goods and Services Tax.) VISA and Mastercard accepted: be sure to include your account number, expiration date, and signature. All orders must be paid in U.S. funds drawn on a U.S. bank. Orders will be shipped via UPS Ground Service. Offer good while supplies last.

## REVIEWS

The biggest problem is the games being lampooned—most are far too old and rudimentary to interest today's audiences. Add to this below-par graphics, crude animation, and action that stresses gag content over gameplay. The program's most inspired moments, including a hilarious satire on software copy protection, actually have little to do with the games. The CD-ROM version also features more than 26 minutes of music and comedy sketches.

Clever in concept, Wacky Funsters takes broad aim at its intended targets but completely misses the mark.

SCOTT A. MAY

Tsunami  
Distributed by Accolade  
(800) 245-7744  
\$29.95

Circle Reader Service Number 457

## BLOODSTONE: AN EPIC DWARVEN TALE

Role-playing adventures are a dime a dozen these days. (They may even be down to a nickel.) So what distinguishes Mindcraft's *Bloodstone: An Epic Dwarven Tale* from the scores of RPGs crowding software shelves? Unfortunately, very little.

Following an annoyingly slow installation process, *Bloodstone* rewards with fluid, easy-to-learn, mouse-driven gameplay. But an efficient, Ultima-like overhead view of the characters is marred by the game's seemingly low-resolution graphics; the terrain is crisp but the characters themselves appear as small, indistinguishable color blobs.

Still, *Bloodstone* is not without its positives. Sound effects are sparse but superb, and the game engine features a diverse collection of magical objects and spells. Most importantly, combat is challenging and lots of fun; it'll take more than a little hacking and slashing to see your party through a monster ambush. Fortunately, *Bloodstone* does include the obligatory save-game feature so you can try, try again.

RPG die-hards will enjoy *Bloodstone's* expansive landscape and exciting melees, but overall this well-done game has little to make it stand out from a crowded pack.

RICK BROIDA

Mindcraft Software  
(800) 525-4933  
\$39.95

Circle Reader Service Number 458

# PICK-UP THE PHONE



# AND PICK TWO GAMES FREE!

# 1-800-877-1995

# Choose any Two Sierra Games when you switch to Sprint



Sprint long-distance service just became more valuable - up to \$159.95 more! Now, when you switch your home long-distance service to Sprint, you can select any Sierra game, free! And after enjoying six months of high-quality long-distance, you'll receive a second Sierra game or one month of free long-distance service.\*

Only Sprint can offer you a nationwide 100% digital, fiber optic network that provides the long-distance quality and reliability you need. Experience for yourself Sprint's "fiber optic" clarity that makes both your long-distance calls and PC data transmissions crystal clear and error free.

But unsurpassed call and data clarity is just one of the many benefits you will enjoy as a Sprint customer...

### "The Most<sup>sm</sup>" A Unique Calling Plan

Sprint offers an unprecedented long-distance calling plan called "The Most<sup>sm</sup>" available now for all customers. The Most will save Sprint customers 20 percent on already low rates on their calls each month to whomever they talk

to the most, including international calls—even if the called person is with a competitive long-distance carrier.

The Most will also provide automatic 20 percent discounts on all calls to Sprint's millions of customers, anytime and anywhere.

When the most frequently called number in a given month is a Sprint customer, Sprint will combine both discounts for an effective overall savings of 36 percent on calls to that number.\*\*

### Save on Long Distance When You're away from home too!

Sprint's FONCARD<sup>SM</sup> travel card lets you continue to take advantage of clear calling and savings even when you're away from home. Plus the FONCARD is free, with cards available to every member of your family.

### The Service You Deserve

At Sprint, we make no compromises when it comes to dependable, personal service - we do it all; operator services, directory assistance, customer service,

even instant credit for wrong numbers. And we do it 24 hours a day!

### No Risk Guarantee

Your satisfaction is guaranteed: we'll pick up the cost of switching your long distance to Sprint, and will even pay to switch you back if you are not completely satisfied. (Some restrictions apply.)

So why not sign up for Sprint and receive the clarity, savings and service you want while getting two Sierra games you enjoy?



\* Offer valid only in the U.S. and for new Sprint customers. Not valid for FONCARD - only orders. Certain restrictions apply. Free month is up to \$25 usage on 4th month invoice. To qualify for a second game or free month of long-distance the customer must bill \$20 per month in 3 of the first 6 months.

# Raging Games

FOR IBM & COMPATIBLES  
 Throw yourself into the  
 Catacombs and Dungeons  
 in a world of Crazy Dragons,  
 Monsters and Magic.

**BECOME A TRUE  
 ADVENTURER  
 BUY ALL 6 FOR  
 THE PRICE OF 5**  
 Check The Boxes Below  
 For The Hottest Thrillers...

## Hottest

- MORAFF'S WORLD
- COMMANDER KEEN
- KINGDOM OF KROZ II
- HUGO'S HOUSE OF HORRORS
- DUKE NUKEM
- QUATRIS

all require 640K, EGA/VGA monitor, HD or greater

**To Order:**  
 Send This Ad With \$2.89, Check or Money  
 Order, for Each Game, Plus \$1.00 Shipping  
 for 1st. Game & .50¢ Each Additional Game.  
 (if you order all 6, figure cost & shipping  
 for only 5) 1-3 Weeks For Delivery.  
 "FREE Listing with your order."

- or -  
 Send \$1.00 Cash, Check or Money Order For  
 A Full Listing of all Our Heart Stopping  
 Adventures & Major Discounts.

Only \$2.89 ea.

**BOOMERANG  
 SOFTWARE**  
 6047 TAMPA AVE., #305  
 TARZANA, CA 91356  
 Fax Orders (818) 881-1046

Shareware programs require separate  
 payment if found useful. IBM is a  
 registered trademark of International  
 Business Machines, Inc.

## FREE Catalog!

Call 1-800-862-2457  
 For FREE CD-ROM Catalog

- Nightowl 10 \$39
- Mad Dog McCree \$43
- New Grolier MPC Encyclopedia \$239
- So Much Shareware 3 \$39

### Many Titles In Stock!

Adult Titles Available

#### UNI-ROM

5694 Mission Ctr. #449, San Diego, CA 92108



(619) 279-1139



FAX (619) 279-8543

Circle Reader Service Number 170

• AMIGA • IBM • MAC • WINDOWS •

**You Are Invited**

to sample the world's finest  
 selection of leading software.  
 Presented by the world's largest  
 distributor of shareware.  
 Call for information.

**S/MC**

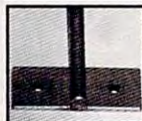
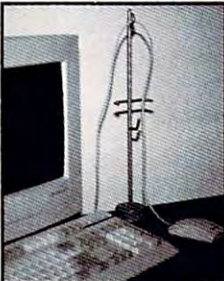
Software of the Month Club®  
 5816 DRYDEN PLACE • CARLSBAD, CA 92008  
 PH: 619-931-8111, EXT. 509  
 FAX: 619-929-1163

GENERAL INTEREST • CLIP ART • GAMES • FONTS

GENERAL INTEREST • CLIP ART • GAMES • FONTS

### Arnie's Answers presents... "A Better Mouse Trap"

Keeps the "Mouse" out of the way when not in  
 use, and the tail out of the way when it is in use.  
 Made of Stainless Steel, with mar free contact  
 surfaces, approx. 16" tall. Three mounting  
 styles; pedestal, clamp, or screw mount.  
 Your choice \$23.95 + \$4.50 shipping.



VISA / MC 1-800-301-3435  
 or send check or money order to:  
 P.O. Box 2216, Cedar Park, TX 78630-2216

Circle Reader Service Number 233

## COMPUTE's Product Mart

is a special advertising section  
 designed to benefit you, the PC  
 direct marketer, by letting you  
 advertise directly to the readers  
 that buy. We offer:

- **Marketing Assistance**  
 Each ad receives a comple-  
 mentary reader service num-  
 ber that generates a target-  
 ed sales lead mailing list.
- **Qualified Readers**  
 Our readers search the  
 Product Mart for quality  
 hardware, software, and  
 peripheral products they  
 can buy.
- **Guaranteed Audience**  
 Our rate base is guaran-  
 teed at 275,000 per issue,  
 with an actual monthly cir-  
 culation of over 300,000.
- **Cost Effectiveness**  
 Ad sizes range from 1/8  
 (2 1/8 x 3) to 2/3 page, and  
 you can request frequency  
 rates of up to 12 times per  
 year. B/W, 2/color and  
 4/color availability.

Space closing: The 15th of the  
 third month preceding  
 issue date (e.g. May issue  
 closes February 15th).  
 Space limited to a first-reserved,  
 first-served basis.

For ad specifications  
 or more information call  
 Lucille Dennis  
 (707) 451-8209  
 Fax (707) 451-4269

**Call now  
 to reserve your space!**

# What Do PC Jet Jockeys Want?

Hair-Raising Sorties  
Death Defying Maneuvers  
Heroics  
Victory  
Realism  
HOTAS™  
And...

# ThrustMaster® Controls

10150 S.W. Nimbus Ave. Suite E-7 Tigard, OR. 97223 PHONE (503)639-3200 FAX (503)620-8094

Circle Reader Service Number 147

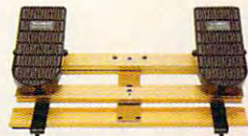
## NEW PRODUCT



The Mark II WCS™  
(Programmable Throttle,  
Also Allows you to  
Program your Joystick)



FCS™ (Joystick)



RCS™ (Rudder Pedals)

## Device Programmers

Connects to PC parallel  
printer port

48 PIN  
ZIF



\$449<sup>95</sup>

EMP-20

- Easy to use software, on-line help, full screen editor
- Made in USA
- 1 & 2 Year Warranty
- Technical Support by phone
- 30 day Money Back Guarantee

- FREE software upgrades available via BBS
- Demo SW via BBS (EM20DEMO.EXE) (PB10DEMO.EXE)
- E(proms 2716 - 8 megabit, 16 bit 27210-27240, 27C400 & 27C800,
- Flash 28F256-28F020, (29C256-29C010 (EMP-20 only))
- Micros 8741A, 42A, 42AH, 48, 49, 48H, 49H, 55, 87C51, 87C51FX, 87C751, 752
- GAL, PLD from NS, Lattice, AMD-16V8, 20V8, 22V10 (EMP-20 only)

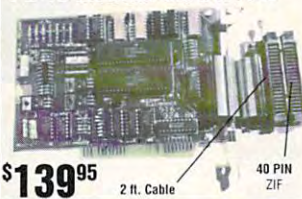
SA-20 8 Gang Eprom



\$750<sup>00</sup>

20 X 4  
Line LCD  
Display

PB-10 Internal Card for PC



\$139<sup>95</sup>

2 ft. Cable  
40 PIN  
ZIF

FOR MORE INFORMATION CALL

## NEEDHAM'S ELECTRONICS, INC.

4539 Orange Grove Ave.  
Sacramento, CA 95841  
(Monday-Friday, 8 am-5 pm PST)



C.O.D.

(916) 924-8037

BBS (916) 972-8042  
FAX (916) 972-9960

Circle Reader Service Number 191

# Voice Mail Cash Machine

Press 1 for  
sales, 2 for  
service, 3 for  
live operator

Make thousands of dollars effortlessly by installing a *BigMouth* voice package in your 286/386. Use it to answer your home-office phone, rent pocket-pagers, advertise products, or operate a pay-per-call service using major credit cards, passwords or a nationwide 900 #.

To get started, order our \$25 PC Opportunity Toolkit. It contains all the information you need & its cost is applied to all future purchases.

### A Few Home-Based Ventures Featured In Our \$25 Toolkit!

- |   |   |  |
|---|---|--|
| <b>BigMouth</b><br>voice/fax/pager<br>rentals<br>\$295. (Demo \$25)   | <b>QuickLine</b><br>write programs<br>in QBasic<br>\$1745. (Demo \$25)      | <b>ClientCaller</b><br>outbound<br>prospector<br>\$1450. (Demo \$25)   |
| <b>KinderChek</b><br>latchkey child<br>monitor<br>\$2250. (Demo \$25) | <b>Rise'n Shine</b><br>wake-up &<br>reminder service<br>\$1995. (Demo \$25) | <b>TollBridge</b><br>sell long<br>distance time<br>\$1995. (Demo \$25) |

**DemoSource™**  
The Voice Application Superstore

8345 Reonda Bl, Ste 202  
Northridge, CA 91324 USA

Trademarks belong to their publishers

**TRY** our demoline! 818 718-9560



To order, call 24 hours:

www.demosource.com

Circle Reader Service Number 131

# FREE 486 Computer Color Monitor, Printer



FREE CBSI 486 SX Computer

You can earn \$2,000 to \$10,000 per month from your kitchen table providing needed services for your community. Computer Business Services needs individuals to run a computer from their home. If you purchase our software, we will give you a FREE 486 computer, VGA color monitor, 120 meg hard drive and a printer. If you already have a computer, we will give you a discount. The industrial revolution is over but the service revolution is just starting. Rather than setting up offices all over the U.S., we are showing individuals and couples how to provide our services and letting everyone involved in this service revolution reap the benefits. Our way of training our new service providers and their success rate is the talk of the computer industry. Call or write for a free 3 hour cassette tape and color literature and find out how easy it can be for you to earn money in your spare time and help your community. Begin part-time and still retain the security of your present position.

Call toll-free:

**1-800-343-8014, ext. 303**

(in Indiana: 317-758-4415) Fax to: (317) 758-5827 Or Write:

Computer Business Services, Inc., CBSI Plaza, Ste. 303, Sheridan, IN 46069

## Trick Your Kid Into Learning Math!

Adventure LearningWare™

presents  
**Treasure Hunt Math™**

"Treasure Hunt Math is a good example of how educational software can be downright fun for kids." —Shareware Magazine.  
"This is a great game, my 6-year old can multiply, level 2; my 9-year old will actually sit and do fractions!" —J. Stevenson, MD.

Includes **MathTris™**, the addictive, falling-blocks style math game!

Perfect for your kid; makes a thoughtful gift too.



- Non-stop action game featuring colorful, animated graphics and sound presents elementary math for grades 1 through 6.
- Over 1000 math facts covering addition, subtraction, multiplication, division, decimals and percents.
- Features record keeping, math problem editor, high score list and printing of certificates of achievement.
- School lab packs & site licenses available.

Requires IBM® PC or compatible with EGA or VGA graphics.  
**\$39.95** Sugg. List Price. Only **\$19.95 + \$2.95** postage  
(California residents add \$1.65 sales tax)

Order with Visa/MC: (800) 829-5519, 7 days a week.  
Fax (408) 224-4455. Inquiries (408) 224-5519.

Or, send check or money order to: Adventure LearningWare  
5667 Snell Ave. #236 • San Jose, CA 95123

**Our 30 day money back guarantee:**  
Your complete satisfaction or your money back.

## LEARN COMPUTERS!



Home study. Learn the personal computer for a better career and an easier home life. Exciting, easy to follow. Free booklet.

**CALL 800-223-4542**

**THE SCHOOL OF COMPUTER TRAINING**

6065 Rosewell Road  
Dept. KA68002, Atlanta, GA 30328

USE YOUR PRINTER TO MAKE  
**SIGNS AND RUBBER STAMPS**  
for your own use or a profitable sideline business



Self-inking and traditional knob handle stamps can be made for less than \$1. Retail prices will start in the \$10+ range.

Informational signs, nameplates, control panels, name badges, and hundreds of other signage items can be made for pennies per square inch.



Complete systems are less than \$2,000

**JACKSON MARKING PRODUCTS CO., INC.**  
Brownsville Rd., D-200, Mt. Vernon, IL 62864  
Phone: 800-STAMPCALL Fax: 800-STAMPFAX

Circle Reader Service Number 22  
[www.commodore.ca](http://www.commodore.ca)



This extraordinary program provides a sense of "security" by providing a complete identification of a child should an emergency occur.

- A Business You Can Be Proud Of
- Full or Part Time
- Continued Dealer Support
- Turnkey Package - Computer, printer, software, ID system supplies and training just \$6995.00

**CALL TODAY for FREE INFORMATION**

**214-248-9100**  
3216 Commander Dr.  
Suite 101 • Dept 27  
Carrollton, TX 75006

CHILD'S NAME Nicole M. Allen	SEX F
NICKNAME Nikki	BIRTH DATE 06/14/92
ISSUE DATE 12/15/92	EYES Bro
	HAIR Bro
	HEIGHT 42in
	WEIGHT 45lb
PARENTS OR GUARDIAN'S ADDRESS James & Maria Allen 123 Main Street Dallas, TX 75555 (214) 555-1212	
DISTINGUISHING MARKS None	BLOOD TYPE O+



## Sign Up

Start your own Vinyl Sign Making Business for as little as \$2995

- In-store or mobile locations
- No Experience
- Glass etching and Metal engraving equipment also available
- Start part-time from home

**CALL TODAY!**

**1-214-248-9100**

**D & K Enterprises, Inc.**

3216 Commander, Suite 101, Dept 27  
Carrollton, Texas 75006



# MAKE MONEY WITH A COMPUTER

With Best Personalized Books own a lifetime license for a patented product that will please adults, delight and educate children, and return high profits on a minimal investment.

That's the sure-fire success formula that Best Personalized Books offers to distributors who are building strong, easy to run, highly profitable businesses.

As the leader in the industry Best Personalized Books has exclusive licensing agreements from Mattel Toys Inc. for Barbie™, from Warner Bros. for Bugs Bunny™ and The Looney Tunes™ and from the National Football League (N.F.L.™).

Best Personalized Books become instant favorites because the child is the star of each story and friends and relatives join in on every adventure. An extensive array of titles

appeal to a wide range of ages and tastes, and includes well-written stories on religious and ethnic themes that reinforce family values.

No computer experience is necessary to create Best Personalized Books. A comprehensive training manual shows you how to personalize a book in just minutes. And with Best's strong marketing program, you'll find selling options are limitless. You can work at home, on location at malls, craft fairs, flea markets, home parties, or in conjunction with local businesses or fund-raising groups.

Strong dealer support is a priority, as is the commitment to helping you make even bigger profits with other popular personalized products including clocks, audio cassette tapes, birth announcements, calendars and stationery for teens and adults.



For just \$1495 start your own highly profitable business creating personalized children's books with a computer.

## Best Personalized Books Inc.

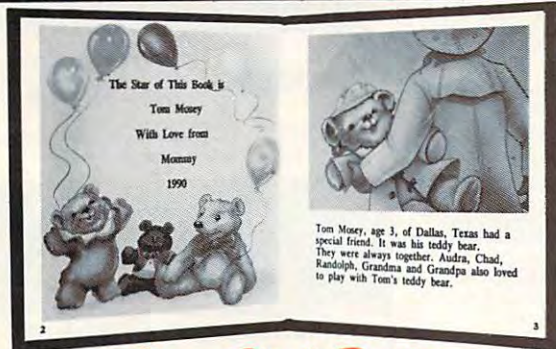
475 Best Personalized Plaza • 4350 Sigma Drive • Dallas, Texas 75244

## (214) 385-3800

Call or write for free sample book and information kit

Best Personalized Books holds US patent 5213461 to produce personalized books. Barbie™, Bugs Bunny™, The Looney Tunes™, the N.F.L.™ and associated trademarks are owned and used under exclusive licenses from Mattel Toys, Inc., Warner Bros. and the National Football League.

## PERSONALIZED CHILDREN'S BOOKS



### Very High Profit

- With our process and a computer you can instantly produce the highest quality personalized children's books and stationery on the market today.
- All books are hardbound with full color illustrations and laser quality printing. Ideally suited for home based business, malls, department stores, fairs or mail order.
- Very simple to operate and highly profitable.
- Only a limited number of dealerships available.

For a complete information packet call today.

**(214) 248-9100**

**D&K ENTERPRISES, INC. • 3216 COMMANDER DRIVE SUITE 101 • DEPT 27 • CARROLLTON, TEXAS 75006**

## EARN \$5000 PER MONTH With your home computer!



Spending too much on your computer? Now its time to let it earn good money for you! Our two successful Software

Packages, MoneyMaker Volume-1 and MoneyMaker Volume-2 will give you all the insider information you need to start your own PROFITABLE BUSINESS Part-Time at home!

Your cost for all this extra income?

Only \$29.95 for MoneyMaker Volume-1!

For BOTH VOLUMES NOW send just \$39.95 !!!! Includes FREE Talking Expert System Demo and 3 BIG Catalogs full of more Money Making ideas!

3 Catalogs & Demo Disk - Send your check for \$5 We always pay postage

Please specify disk size or we ship 3.5" - Check, American Express, or P.O. to: **BUSINESS COMPUTER SYSTEMS, INC.** 46-16 65TH PLACE DEPT. COM-17 WOODSIDE, N.Y. 11377 PHONE (718) 898-3126

## LIQUIDATIONS CLOSEOUTS & BARGAINS

If you think you can't afford quality commercial software ... think again! Although we carry the top 100 software hits and a full line of accessories for your IBM compatible, we specialize in closeouts, liquidations and CD ROM software at rock bottom prices! Let us do the bargain hunting for you! Find out why thousands of computer users choose us as their one stop software supplier.

We publish one of the best catalogs in the industry. Call or write for your free copy!



Software Support International  
2700 N.E. Andresen Rd.  
Suite #A-10  
Vancouver Wa 98661  
(206) 695-1393

**CALL TOLL FREE TODAY! 1-800-356-1179**

Major Credit Cards Accepted.

Above examples don't include S/H charges. Call or write for details.

Circle Reader Service Number 210

## The Amish Outlaw

Shareware Company  
3705 Richmond Ave. Staten Island, NY 10312

### The Amish Outlaw 10 Most Wanted

1. **Solar Winds** - a unique combination of fast paced arcade action and an outer-space role playing game, with 256 color VGA animated graphics. (JOYSTICK) (VGA) (SB)
2. **Major Striker** - an excellent shoot'em up game from Apogee, Major Striker's mission is to destroy the evil aliens and return home to the beautiful Yushima. (VGA) (SB)
3. **Zone 66** - an ultra high tech 32-bit arcade game for 386 & 486 PCs. You pilot your fighter jet through a 360 degree scrolling combat zone that's jam packed with enemies & terrain. (VGA) (Sound Blaster) (Joystick) (HD) (2 Meg RAM)
4. **Monster Bash** - Help Johnny Dash save his dog from court chuck. The most animated game Apogee has created to date. (Sound Blaster) (VGA)
5. **Overkill** - an excellent graphic shoot 'em up game in which you destroy planet after planet gaining power as you progress from planet to planet. (VGA) (SB)
6. **Space Chase** - Jason Storm battles the forces of evil for control of a vast city! 10 massive levels. (EGA-VGA) (HD) (SB) (286 OR BETTER)
7. **Catacomb Abyss 3D** - Battle magics, skeleton warriors and zombies as explore the catacombs. (PC-13) (588k of free ram) (EGA-VGA) (Hard Drive) (Sound Blaster)
8. **Bio Menace** - Total action, Duke Nakum-style, shoot-everything-that-moves adventure. (Sound Blaster) (EGA-VGA)
9. **Megatron** - enter the labyrinth combat zone and hunt down the adversary, experience the highest level of virtual reality combat available in shareware to date. (2 can play by modem) (VGA) (Hard Drive) (mouse optional) (2 disks)
10. **Gateworld** - Captain Klondike meets the G.O.R.G. machine in an asteroid in this great arcade action game. (VGA) (Sound Blaster)

3.5" AND 5.25" SAME PRICE 1-9 DISKS \$3.00 10&UP \$2.50  
\$3.00 SHIPPING & HANDLING

**CALL: 1-800-947-4346**  
FOR FREE CATALOGUE

Circle Reader Service Number 229

## VALUE SOFTWARE

### "CHECK" US OUT

The Best Shareware  
On The Planet

- ✓ Windows/Games/Fonts
- ✓ Multimedia/Graphics
- ✓ Educational/Utilities
- ✓ Desktop Publishing
- ✓ Business Applications
- ✓ New User Start Up Kits

IBM Compatible/Virus Free/ASP Member

**FREE Catalog, Call**

**800-824-0413**

Circle Reader Service Number 127

## Digital Orchestra

Musical instruments for your PC or Amiga  
PC - 8 Bit, 8K WAV files Amiga - 8SVX IFF files

- SA01 Bass Guitars - Slap Bass, Fretless, Picked, etc.
- SA02 Brass - Tuba, Trombone, Trumpet, French Horn, etc.
- SA03 Reeds - Clarinet, Oboe, Saxophone, Bassoon, etc.
- SA04 Strings - Violin, Viola, Cello, Orchestral, etc.
- SA05 Guitars - Acoustic, Electric, Lead, Jazz, etc.
- SA06 Pianos - Pianos, Electric Piano, Honky-Tonk, etc.
- SA07 Latin Percussion - Timbale, Conga, Bongos, etc.
- SA08 Drums 1 - Bass Drum, Snare, Tom, Cowbell, etc.
- SA09 Drums 2 - Hi-hat, Guiro, Conga, Cymbal, etc.
- SA10 Percussion - Steel Drum, Talko, Bell, Woodblock, etc.
- SA11 Organs - Cathedral, Electric, Bandoneon, Reed, etc.
- SA12 Ethnic - Sitar, Koto, Baggio, Kokyu, Banjo, etc.
- SA13 ChrPerc - Marimba, Xylophone, Celesta, etc.
- SA14 Pipes - Flute, Piccolo, Recorder, Whistle, etc.
- SA15 Ensemble - Orchestral, Strings, Voice, Solo Choir, etc.
- SA16 Choirs - Three or more harmonious singing voices.
- SA17 Piano Chords - Major, Minor, 6th, 7th, 9th, etc.
- SA18 Organ Chords - Church Organ and Electric Organ
- SA19 Synthesized - Calliope, Square Wv, Saw Wv, etc.
- SA20 More Chords - Accordion, Honky-Tonk Piano
- SA21 Organ2 Chords - Sounds of the Cathedral Organ
- SA22 Voice Organ - Unique Voice + Elec Organ chds
- SA23 More Chords - Accordion, Honky-Tonk Piano
- SA24 Synth Sounds - Fantasia, SpaceVox, Sweep, etc.
- SA25 SynthSFX - Electric Gat, Ghost, Stratosphere, etc.
- SA26 Foreign - "Hello", "Yes", "1,2,3", in 8 languages

Disk  
or  
CD!



### The Sorcerer's Apprentice

2201 Coquina Drive, Reston, Virginia 22091  
Tel (703) 758-8478, Fax (703) 820-4779  
1-800-469-6737 (orders only, please).

Each disk, \$5.95, 3 for \$4.95 @ ten for \$39.95. Complete collection for \$69.95. NEW - Digital Orchestra on CD - \$59. Also available MED music construction kit & sound sampler. Send for free complete listing. Shipping \$3, ten or more disks \$5. Add \$4 for COD, UPS 2nd Day Air. Canada - \$6 shipping, add 30% if paying in Canadian dollars. Canadian checks accepted. Overseas, add \$8 shipping. Visa/MC/Check/Money Order.

Circle Reader Service Number 230

## Unbelievable CD-ROM Price Breakthrough!

**Mad Dog McCreo**  
Arcade Smash Hit!  
**\$39.95**

**7th Guest**  
**\$39.95**

**Learning at Home**  
The Berenstain Bears  
**\$27.95**

### Make Your Own Bundle - Select 3 Titles

- |   |   |
|---|---|
| <p>Any three for \$79.95</p> <ul style="list-style-type: none"> <li>• Loom</li> <li>• Secret Weapons of the Luftwaffe</li> <li>• Battlechess</li> <li>• Space Quest IV</li> <li>• Monkey Island</li> <li>• Wing Commander &amp; Ultima VI</li> <li>• Kings Quest V</li> <li>• Where in the World is Carmen Deluxe</li> <li>• Arthur's Teacher Trouble</li> <li>• Total Baseball 93</li> <li>• Dinosaur Adventure</li> <li>• Chessmaster 3000</li> </ul> | <p>Any three for \$59.95</p> <ul style="list-style-type: none"> <li>• World Atlas</li> <li>• US Atlas 3.0 (MPC)</li> <li>• Family Choice</li> <li>• Jones in the Fast Lane</li> <li>• Languages of the World</li> <li>• Stellar 7 (space battle)</li> <li>• Time Table History</li> <li>• Mavis Teaches Typing</li> <li>• Sherlock Holmes</li> <li>• Sports Illustrated Almanac (MPC)</li> <li>• Sleeping Beauty</li> <li>• CD Storytime</li> </ul> |
|---|---|

Many Additional Titles Available. Call or Write for Our Free Catalog.

To Order Call: (419) 874-0288 or Fax: (419) 874-2944 or Mail to:

**Computer Gallery**  
P.O. Box 409, Perryburg, OH 43552

\$5.00 S&H per order. Visa, MC, Personal Check or Money Order Accepted. Add \$5.00 for 2nd Day or \$10.00 for Overnight Delivery.

Circle Reader Service Number 204

## Games Too Expensive?

Consider Pre-owned Software

- Save big \$\$\$ over new
- Original disks and manuals
- IBM - AMIGA - C64
- Hard-to-find classics plus all the latest releases
- Call or write for free catalog (specify computer)

## Bare Bones Software

940 4th Ave #222 Huntington WV 25701

**1-800-638-1123**

Customer Service: 304-529-0461

BBS for complete list: 304-529-7050

**PHOENIX FIRE** ... a kind of high-tech Ouija Board. \$39.95.

**THE MAGIC MIRROR** ... a toolbox for your mind. E. Kinnie, PhD., Clinical Psychologist. \$39.95.

**MERLIN** ... an apprenticeship. \$29.95.

**I CHING** ... ancient Chinese wisdom and prophecy. \$29.95.

**THE MAGIC MOUNTAIN** ... a journey into another reality. Not for children. Male and female versions. \$39.95.

Blue Valley, 29 Shepard St., Walton, NY 13856

MasterCard/Visa 1-800-545-6172

Circle Reader Service Number 173

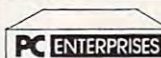
## IBM PC, PCjr XT, AT, & Tandy Users

Not everyone needs the fastest computer money can buy. RUN Lotus 1-2-3, WordPerfect, dBase, and most other software without buying a new computer! We specialize in hardware products that allow older computers to run the latest software.

Call for information and free catalog!

**You don't have to buy a new  
Computer to run the Latest  
Software!**

**(800) 922-7257**



2400 Belmar Blvd.  
PO Box 292  
Belmar, NJ 07719

*Computer Upgrade Specialists Since 1984*

Circle Reader Service Number 221

## REMOVE HARDWARE LOCKS

**PROTECT YOUR INVESTMENT!**

**MAINTAIN PRODUCTIVITY!**

Software utility that allows for the removal of hardware locks.

Available for most major  
CAD/CAM and PCB  
software programs

*Easy - Simple - Guaranteed*

**Programs start at \$99.00 U.S.**

Visa and Mastercard Welcome

Call or Fax for more Information

SafeSoft Systems Inc. PH (204)669-4639  
201 - 1111 Munroe Ave. FAX (204)668-3566  
Winnipeg, Mb. Canada R2K 3Z5

[www.commodore.ca](http://www.commodore.ca)

Circle Reader Service Number 212

# MAC-IN-DOS

Software breakthrough  
lets PCs read, write,  
and format Macintosh  
high-density diskettes.



Call 1-800-628-3475 today.



**Pacific Micro**

201 San Antonio Circle, C250, Mountain View, CA 94040

Circle Reader Service Number 156

C:\CALL\WINDOWS.900  
File Edit Search Dial 1-900-454-4370 69c Per Minute

# WINDOWS 900

The Number One Shareware Source For:  
Business Programming Games  
Utilities Fonts Graphics

## New! Easier To Use!

**LARGE XXX ADULT AREA!**  
Must be 18 or over to call...

Use Your High-Speed Modem And Call:

# 900-454-4370

2400 bps - 16.8 bps USR V.32/bis V.42/bis 8,N,1

**69¢ per minute**

**NO CREDIT CARDS  
NO MEMBERSHIP  
FAST, EASY ACCESS  
NO LONG DISTANCE CHARGES**

Callers under 18 years of age MUST have parents permission

Circle Reader Service Number 128

## ORDER YOUR LIMITED-EDITION PENTHOUSE ONLINE 9600 DATA/FAX MODEM TODAY AND SAVE!

### A CUSTOM, LIMITED EDITION PENTHOUSE ONLINE 9600 DATA/FAX MODEM FOR LESS THAN **\$170!**

Penthouse magazine has teamed up with U.S. Robotics to offer a top-grade 9600-bps data/fax modem for only \$169 (internal board) or \$179 (external). These high-speed V.32-compatible modems feature V.42/MNP 2-4 error control, V.42bis/MNP 5 data compression, and throughput of up to 38.4. The external model (shown) has a custom, limited-edition black case with the famous Penthouse Key symbol.

Features include autodial and -answer, frequently called number storage, nonvolatile RAM (stores all modem settings), summary of current modem setting display, speaker with volume control, onscreen call progress reporting, five-year parts and service warranty, an extensive owner's manual, and a quick-reference card. The internal modem comes on a 10-inch board that fits all IBM PC bus-compatible computers, and can be addressed on COM ports 1-4.

Plus, you will also receive the BLAST® FAX PC™ fax software, which lets you send or receive faxes from your computer. Compatible with all G3 machines, BLAST®



**ORDER  
YOUR  
CUSTOM  
MODEM  
TODAY!**

FAX PC™ allows transmission scheduling, hot-key faxing from within applications, background operation, and much, much more.

Circle Reader Service Number 107

# FREE IBM & MAC SOFTWARE CATALOG

32 Pages! ASP Member

SOFTSHOPPE, INC.

P.O. Box 247  
ARTESIA, CA 90701  
Tel: (310) 802-1333  
FAX: (310) 802-1494



Toll-Free—24 Hrs.  
**1-800-851-8089**

Circle Reader Service Number 126

# Islamic Software for DOS/Win/Mac Qur'an, Hadith, Islamic Law

The Alim™ lets you search and study the Qur'an, Hadith, Fiqh, Islamic history, biographies, commentaries, dictionaries, concordances, and more! All in one inexpensive integrated package with both Arabic and English support!

**(800) 443-3636**

(713) 893-0805 or (713) 893-0558 fax

ISL Software Corporation

2037 Featherwood Street, Dept CM-1193  
Silver Spring, MD 20904-6645 USA

Circle Reader Service Number 232

## Save BIG \$\$\$ on printing costs



WaterProof Ink Available

### Jet-Master

Re-usable jet-printer recharge kits, Single and Multicolor. Buy kit once, then just buy ink as needed. Costs as low as \$1 per recharge. **from \$29.95**



Re-ink your ribbon cartridges for less than 5c with the famous **MacInker™**  
Over 210,000 sold

Beautiful printing and longer printhead life. Avg. cartridge can be re-inked 60-100 times. Universal cartridge model .....79.95  
Epson MacInker .....49.95  
Multicolor Adapter (4-band ribbons) .....40.00

**Computer Friends, Inc.**

14250 NW Science Park Drive - Portland, OR 97229  
To Order 1-800-547-3303 Tel. (503) 626-2291

Circle Reader Service Number 225

## WIN LOTTO! GAIL HOWARD'S SMART LUCK® LOTTERY SYSTEMS

Won 39 Lotto Jackpots  
Worth \$79.2 Million Dollars!

The ONLY Software with Documented Jackpot Winners  
ADVANTAGE PLUS™ — COMPLETE histories for ALL 59 Lotto games FREE • No other software has more scientific tools for picking winners • Over 50 valuable charts & reports • 86-page manual on disk shows how to identify winning patterns • Automatic SMART PICKS™ • A \$295.00 value. Special Offer Limited Time Only \$79.95 + \$3 S/H

COMPUTER WHEEL™ — Has 252 Lotto Wheeling Systems with specific win guarantees. All flawless. If one system fails its win guarantee you get DOUBLE your money back! \$39.50 + \$3 S/H

**BOTH for only \$99.95 + \$3 S/H**  
(IBM/Comp. 5.25 or 3.5)

USE THIS SYSTEM AND YOU WILL TRASH  
ALL YOUR OTHER LOTTERY SOFTWARE!

A PROVEN WINNER! • DON'T SETTLE FOR LESS.

**1-800-876-4245**

SMART LUCK® SOFTWARE

Dept. C-12, P.O. Box 1519 • White Plains, NY 10602  
1-800-876-GAIL (4245) or 914-761-2333

Circle Reader Service Number 109

NEW  
Challenging

## From NO-FRILLS Software

### SNOSAE

Save the earth — and yourself — from the reptilian alien — A classical text adventure game (on-line hints): **\$15.00**

### XXTICS I

Test your word abilities to the max with these 50 Crostics Puzzles: **\$11.00**

Requires IBM or compatible and HD; sent on 5 1/4", 360K floppies.

Send name, address, check or money order to:

**NO FRILLS SOFTWARE**  
P.O. Box 44608, Dept. C  
Eden Prairie, MN 55344

MN residents add 6 1/2% sales tax.  
Allow 4 to 6 weeks for delivery.

## PENDRAGON Software Library

Public Domain/Shareware for  
IBM & Compatibles  
ASP Member

No Viruses \* Latest Versions  
Over 2500 Programs

### FREE 80 page Catalog

We also carry CD-ROM discs

Premier Shareware CD - 1 Gig - \$24.00  
Desktop Publishers Dream Disk + Book  
650 Megs of Fonts and Clipart - \$36.00

PO Box 56  
E.Greenwich, RI 02818

## 1-800-828-DISK

Circle Reader Service Number 235

# Computer fun

## Home Entertainment Organizer

Computerize your Video, Audio, and Book Libraries with this advanced database software for IBM. Search by multiple criteria. Instantly change sort order. Then print personalized labels or reports with a keystroke. Indispensable for the serious video or audiophile.

**Now only \$49.95 + \$3. S&H.**

**30 Day FREE TRIAL**

Pay only after you test drive HEO on your own computer, or return it for full credit.

To order call  
**1-800-238-2154 anytime.**

Circle Reader Service Number 145

## 2000 Fonts

### Fantazia Fonts and Sounds Over 2000 TrueType and Adobe Fonts on CD-ROM

Hundreds of Bonus Sound Files  
Included is a FREE 102 page book with a sample printout of all the fonts.

Icons, Wallpaper and More for Windows

5000 Icons and 800 Pieces of Wallpaper  
Includes a FULL color book of the icons and wallpaper

\* 50 Free Fonts \* Bonus Sound Files

Order either of these Quality CD-ROM's for **\$49.99**

Or get both AMAZING collections for only **\$79.99**

**1-800-951-0877**

Fantazia Concepts, Inc.  
35143 Vine Street Fax  
Eastlake, Ohio 44095 216-951-9241

Circle Reader Service Number 134

Ready . . . for our extensive selection of software at low, reasonable rates

Set . . . for thousands of titles for your IBM, Amiga, Atari, Mac, CD Rom & Genesis?

Go . . . Call now for a free listing

**1-800-433-2938**

Wedgwood Rental  
5316 Woodway Drive  
Fort Worth, Texas 76133

# FREE CD-ROM DISC!

Mega Demo & Test contains 350 Megs of PC Shareware & PD software. Including Special CD-ROM Benchmark and Test Utilities written by our programming staff, & NOT available on any other CD-ROM Discs. Our Special Test Utilities measure throughput as well as access time in a reliable and consistent manner for a meaningful real-world benchmark for CD drives. The Disc and Interface Software are fully functional (Even for BBS Use) and not crippled in any way. When purchased separately Mega Demo and Test is \$14.00 plus \$6.00 for S&H. However for a Limited Time This Demo and Test CD-ROM Disc is Free with any CD Disc purchase.

These are the Only Shareware & PD CD-ROM Discs with both a DOS, and a Windows 3.1 "Hypertext" Retrieval Interface. Plus All CD Discs are BBS Ready, and include files.bbs plus our BBS Door with "Remote User" Mouseable Pull-Down Menu Interface.

PROFIT PRESS, 824 E. Ft. Lowell, Tucson, AZ 85719 - Info (602) 770-0000 FAX (602) 770-0005 - BBS (602) 770-0008

The prices listed above do not include shipping and handling. Special shipping and shipping to foreign countries is available.



S.R.P. \$79.00 ea. **New! JUST RELEASED! New!** S.R.P. \$79.00 ea.

**Mega CD-ROMs**  
PC Shareware Spectacular

650 Megs 1 Plus Gigs Uncompressed! Our Newest in The Mega CD-ROM Series. Contains Utilities of All Types, Word Processors, Data Bases, Communications, Graphics Tools, CAD, Business, Education, Programming, Hobby, Games, Sports, Sound Files, 256 Color GIF's, FLI's, Bibles, Fonts, Windows Programs, BBS, Plus Much More!

**Mega Windows 2**  
Windows (Shareware / Public Domain)

Our Newest in the Mega Windows Series. This Disc Contains Windows Utilities of All Types, Windows Application Programs of All Types, Windows Communications Programs, Windows Games, Windows Fonts, Windows 256 Color Graphics BMP, Windows Sound Files, WAV, Windows Drivers and Icons, plus OS/2 Shareware, and Much Much More!

**Mega Games 1**  
PG Games, Graphics & Sounds

Contains PC Games from Shareware Companies such as Apogee, and Epic, plus many many others. Game Bytes Electronic Magazine, with its categories that include Arcade, Adventure, Puzzles, Mind & Strategy, War Games, Card Games, RPG Games, Plus 256 Color GIF's, FLI's of all types & includes Sound Files, MOD, ROL, WAV & VOC

**Genuine SONY Caddies \$3.50 each with ANY \$49.00 CD-ROM Disc Purchase Limit of 10 Per Customer**

Publisher Direct Price **\$29.00 ea.** Or All 3 New Mega Fantastic MEGA CD-ROM Discs for Only! **\$59.00**

**Forbidden Subjects**

This Disc Contains Hacking, Phreaking, Tone Box Information, Anarchy, Subculture, Magic, Internet & Computer Security Secrets, Bomb Plans, FBI & Police Net Files, Virus Code, Sick & Twisted Graphics, UFO, Occult, Even Ham Radio Files, Plus Much Much More! Everything Fun and Interesting That Absolutely No One Wants You to Know About. Includes MegaSearch for those Fascinating Late Night Text Searches, & (If You Dare) for BBS there's files.bbs Plus MegaDoor and MegaTerminal.

**Our Exclusive! Special Price \$39.00 S.R.P. \$79.00 ea.**



**fao Gold**  
Volumes 1, 2, & 3 "Best of the Best"  
For Adults Only "GOLD" "Wife Proof Labels"  
Each Over 600 Megabytes  
Many Not On FAO 123 - 256 Color SVGA  
Gifs with NO BBS Logos! Plus Animated  
FLI's, GL's, & DL's, Includes Games, and  
Fantasy Text Files. S.R.P. \$79.00 each.

**\$99.00 SET**

**fao**  
Volumes 1, 2, & 3  
For Adults Only "Wife Proof Labels"  
256 Color SVGA GIF's,  
Plus Animated FLI's, GL's & DL's  
Includes Games, & Fantasy Text Files.  
3 Disc Set 1.892 Megs - 16,000+ Files!  
S.R.P. for this Set of 3 Discs \$199.00.

**\$69.00 SET**

**ORDERS ONLY! CALL TOLL FREE 1-800-843-7990**

Circle Reader Service Number 224

# FREE!

Download the HOTTEST & SEXIEST Images from our ADULT On-Line Magazine - FREE!

LACE is an Adult On-Line Magazine that offers you:

- ORIGINAL Adult GIF Images not available on any other BBS!
- GORGEOUS, Sexy & Exotic Models both Amateur and Professional!
- QUALITY Adult GIF Images and VGA Movies produced by professionals!
- HIGH SPEED access available on ALL lines (14.4k down to 1200 baud).

Set your Modem to 8-N-1 and your terminal to ANSI Graphics and dial:

**(818) 709 - 4275**

Questions? Call our voice line at (818) 709-3795.

**LACE**

the on-line adult magazine  
Must be 18 Years of Age or Older • Limited Offer

I'm Christy, the Systems Administrator and part time Glamour Model on LACE. Come & see my images & visit with me On-Line.



Circle Reader Service Number 178

## CD-ROM BIG BANG THEORY

FREE TECH SUPPORT

Ask about our new CD-ROM CLUB

**THE AL BUNDY**

Our tribute to the everyday guy! 3-Some includes Hooter Heaven, The Adventures of Seymore Butts & Paradise Club Interactive for Windows or Digital Dancing for Mac Users. To make it a 4-Way, just add Nightwatch Interactive.

**TRY A 3-SOME OR A 4-WAY**

Take a look at our super 3-Somes & 4-Ways and let us help you build your personal library.

**NOT FOR CABLE TV 2**

3-Some bundle has Cat & Mouse - The Movie, New Wave Hookers and Nightwatch Interactive. For excellent 4-Way action, add Traci I Love You.

**1-800-354-5353**  
ORDER FAX LINE (305) 426-9801

Department 268 • P.O. Box 4188  
Deerfield Beach, FL 33448  
**MUST BE 21 YEARS OLD**

**NOT READY FOR HOLLYWOOD**

Let Porn's biggest stars sizzle your screen & blow your sound card. 3-Some includes Wicked - The Movie, Traci I Love You, and The Mark of Zara Photo CD. 4-Way action? Add Legends of Porn 2.

**FOR COUPLES ONLY**

Porn with a plot? We're close with our 3-Some including Cat & Mouse - The Movie, Betrayal and Sleeping Beauties. Swing Into 4-Way with Double Play II.

**HOT MAGAZINE HONEYS**

3-Some includes the much anticipated Penthouse Interactive (counts as two) and Wicked Photo CD starring Playmate Teri Weigel. Add Hooter Heaven & make it a 4-Way.

**SUPER VGA #2**

Forget GIF disks!! In our 3-Some, you get The Mark of Zara Photo CD, Cat & Mouse Photo CD and Double Play I. 4-Way special bonus - add Wicked Photo CD with free Kodak Access software.

**ALL 3-Somes only \$168**  
**4 - Way action only \$208**

**SHIPPING INFORMATION**  
Fax and Mail Orders receive free 2nd day shipping upgrade  
UPS Ground - \$4.50 • 2nd Day - \$7.25  
Next Day - \$16.25 • Foreign Express - \$22.00  
• 4-Ways slightly more

Test Drive Our **CYBEROTICA** NOW  
(305) 428-0012  
Adult Rated GIFs, JPEGs and Movies  
Chat with Hostess Sin-D  
Multi-Player Game  
On-Line GIF Viewing  
Throbnet, Fidonet and Internet

**FREE**  
1 Year Subscription to CD-ROM Multimedia Magazine with every purchase of a Starware 3-Some or 4-Way

# SeXXy Software™

## SeXXy DISKS™

**SeXXcapades™ . . . The GAME**  
The First Adult Game with TRUE SOUND and 256 Color VGA Graphics

The game everyone has been waiting for. For that evening you won't forget with a loved one or group of very close friends. Fulfill your sexual desires. Find out how your partner would really like to make love. Over 80 Color VGA Scenes • Real Voices Guide the Action • Foreplay Option • Play with 2-8 Close Friends. Now supports SoundBlaster™ cards!  
\$79 - Special Offer: \$69 with purchase of any CD disk / VGA and hard disk required - shipped on high density disks!

**CONNOISSEUR COLLECTION ALL NEW! In 256 Color VGA!!**

ALL movies have sound - play thru standard speaker or SoundBlaster™  
SeXXy Disk #CC1 • ★ YOU BE THE STAR ★ The FIRST CUSTOMIZABLE movie allows you to write the dialog and the title  
SeXXy Disk #CC2 • THE FIRST SOUND MOVIE! The first computer movie with SOUND. See the incredible 256 color VGA graphics while hearing the actual dialog. OURS EXCLUSIVELY!  
SeXXy Disk #CC3 • THE BEST MOVIE! The best computer movie available. Only for the serious collector. 256 stunning VGA colors.  
SeXXy Disk #CC4 • VOLUPTUOUS MOVIE with Sound! See and hear a symphony of exceptionally proportioned women.  
SeXXy Disk #CC5 • ODDITIES MOVIE with Sound! See men of incredible proportions and women with unique abilities - UNBELIEVABLE!  
Prices: 1 Movie \$29. 3 Movies \$65. 5 Movies \$94

**Now You Can Have Your Own GIRLFRIEND™**  
... a sensuous woman living in your computer!

**GIRLFRIEND is the first VIRTUAL WOMAN** You can watch her, talk to her, ask her questions and relate with her. Over 100 actual VGA photographs allow you to see your girlfriend as you ask her to wear different outfits, and guide her into different sexual activities. As a true artificial intelligence program, GIRLFRIEND starts with a 3000 word vocabulary and actually GROWS the more you use it. She will remember your name, your birthday and your likes and dislikes. GIRLFRIEND comes with the base software and GIRLFRIEND LISA. Additional girls will be added. This program requires 7-10MB of free space.

SG3 GIRLFRIEND - Special Introductory Price \$69. FREE - Second GIRLFRIEND Just Added.  
NEW! SG7 GIRLFRIEND TERI - 300+ PICTURES Price \$89.

**ORIGINAL SeXXy DISKS™** - 6 disk set with movies, pictures, games \$32  
ADD \$4 S/H • 3.5" or FOREIGN ORDERS ADD \$2/DISK • IN PA ADD TAX • MUST STATE AGE OVER 21 YEARS.

**VISA/MC Orders Only: 800-243-1515 Ext. 600FM / 24HRS / 7 DAYS**

FAX (215)997-2571 • Or CK/MO to: Sexy Software, P.O. Box 220, Dept. 600FM, Hatfield, PA 19440



# SeXXy Software™

## SeXXy CD-ROMS™

**FREE \$99 Shareware CD-ROM**

with purchase of any 3 CD-ROMS. Not a cheap demo disk - contains thousands of valuable programs in all categories - games, windows, business, education

### SeXXy FLIX

Full Length Digital Movies - Ours Exclusively!

**KING DONG** - The dirtiest dinosaur movie ever made - CRYSTAL HOLLAND stars with prehistoric monsters, cannibals, and lots of special effects.

**TOO NAUGHTY TO SAY NO** - HARRY REEMS and GINGER LYNN star in an erotic daydream in a boarding school for girls - from CABALLERO HOME VIDEO, dir. SUZE RANDALL

**SEX GAMES** - When a hacker taps into a computer dating service he is able to program the wildest fantasies of his sexiest member - SAUNA GRANT stars

**SeXXcapades . . . The MOVIE** - See incredible uses of a mouse and a joystick as a group of friends play our popular SeXXcapades game.

NO HARD DISK SPACE REQUIRED - WINDOWS NOT REQUIRED

### SeXXy CD-ROMS

**SeXXy CD #1** the premiere adult XXX collection - 680 MB of action with: 5268 VGA pictures, 87 movies, 674 stories, games, DARE TO COMPARE!

**SeXXy CD #2** an exclusive collection containing over 900 Super VGA pictures (1024 x 768 x 256) and over 400 VGA pictures (640 x 480 x 256) These are pictures that cannot be found anywhere else! The women and the quality are stunning

**SeXXy CD #3** another collection of over 650 MB of the hottest pictures available. Over 5,000 VGA pictures, movies and utilities that will have you spending days just trying to see it all!  
MENU DRIVEN VIEWING - NO DUPLICATION

### MIX & MATCH CD-ROMS / SeXXy PIX™

BUSTY BABES • ECSTASY • ASIAN LADIES • HOT PIX 2, 3, 4 & 5 • STORM 3 • TROPICAL GIRLS EXOTIC GIRLS • 7TH HEAVEN • ADULT PALETTE • DIRTY TALK • ANIMATION FANTASIES 1 & 2 • AMATEUR MODELS • SOUTHERN BEAUTIES • ADULT REF. LIBRARY • NIGHTWATCH INTERACTIVE • SEYMOUR BUTTS

**ALL CD-ROMS:** First 3: \$99 each or 3 for \$199 (Plus FREE Shareware CD-ROM)  
Then: \$69 each or 3 for \$149

Circle Reader Service Number 116

## Where Adults Come To Play!

The Choice For HOT MODEM FUN!

- HOT CHAT Live W/Thousands of Ladies & Gents in Groups & Private!
- Tons Of Sizzling Hot Message Areas, Shareware Files and Adult GIFs!
- Matchmaker With "DATING-BASE"!
- Straight and Gay Sections!
- Live Competitive Tournament Gaming!
- Unlimited Connect With One Low Price!
- Local Numbers In Over 800 Cities!
- Plus Much Much More!

Now With Our Exclusive FANTASY Area!

**ODYSSEY BBS**  
For Modem Signup or More Info Call:  
**818-358-6968**

Over 18 (BWT)

Circle Reader Service Number 141

The Rain Forest ONLINE!

## 14 Systems to Choose from!

- |               |              |
|---------------|--------------|
| Business Beat | Rain Forest  |
| Magick        | W.D. System  |
| Mac National  | Trading Pen  |
| JewelLink     | Religious    |
| SportsLink    | CoinLink     |
| CollectLink   | ComicLink    |
| The Educator  | Alternatives |

Local Access From Most Major Cities!

New Sign-ups Call!  
**1(813)943-8000**

Customer Service:  
1(813)943-0113

## COLOR RIBBONS & PAPER

COLORS: BLACK, RED, BLUE, GREEN, BROWN, PURPLE, YELLOW

Ribbons Price/Each	Black	Color	T-Shirt
Brother 1109	\$5.50	\$6.50	\$7.50
Citizen GSX140/240, 4-CLR	\$4.00	\$10.00	\$15.00
Epson MX-80	\$3.25	\$5.00	\$6.75
Epson LQ 500/870	\$4.50	\$6.50	\$7.75
Okidata 182/192	\$4.00	\$7.50	
Panasonic 1180/1124	\$4.25	\$7.50	
Panasonic KXP 2123 4-CLR	\$6.50	\$12.50	\$15.00
Star NX1000 4-CLR	\$3.50	\$6.25	\$10.00
Star NX1020 4-CLR	\$6.00	\$11.50	\$15.00
Star NX2420 4-CLR	\$6.00	\$12.50	\$15.00

## COLOR LASER TONER/COLOR INK JET REFILLS

COLOR PAPER: 200 SHTS/ BRIGHT PK. \$10.90  
PASTEL PK. \$7.90 BANNER PAPER 45 FT. RL. \$9.95

### CUSTOM T-SHIRT, DESIGN YOUR OWN



- HEAT TRANSFER RIBBONS/ LASER TONER
- TRANSFER PAPER FOR DOT MATRIX/INK JET/ LASER PRINTERS

Min. Orders \$25.00, Min. S&H \$6.00, Prices subject to change!

## RAMCO COMPUTER SUPPLIES

P.O. Box 475, Manteno, IL 800-522-6922 or 815-468-8081

Circle Reader Service Number 138

## CLOSEOUTS

For IBM/MS-DOS:

### \$10 MICROPROSE DEALS

MILLENNIUM, DR. DOOM'S REVENGE, AMAZING SPIDERMAN, LIGHTSPEED COVERT ACTION -or- TWILIGHT 2000

### \$15 MICROPROSE DEALS

KNIGHTS OF THE SKY, FLAMES OF FREEDOM, RED STORM RISING, ALLIED FORCES, MEGATRAVELLER

### LAND, SEA & AIR BUNDLE!

ONLY \$19.50  
Includes: Pirates!, Airborne Ranger & Gunship. 5.25" only

### MICROPROSE SPECIAL

Your Choice \$25 each  
GUNSHIP 2000  
F-117A STEALTH FIGHTER

### SIERRA \$10 SPECIALS

CAMELOT, POLICE QUEST 2 -or- COLONEL'S BEQUEST.

### CREDIT CARD ORDERS

\$25 MINIMUM  
1-800-676-6616  
Orders Only, please!!

### WE ALSO CARRY APPLE, MAC, C64/128, AMIGA, ATARI & MORE

To order, send check or money order to the above address. California orders must include 7.25% sales tax. All orders must include shipping charges of \$5 for U.S.A., \$8 for Canada, or \$15 for International. For our complete catalog send \$2 in U.S. postage stamps or cash. A catalog is sent FREE with any order. Be sure to specify your computer type & disk size when ordering. For all inquiries & additional information, call (805) 544-6616.

### SIERRA DEALS \$20 EACH

3 or more, ONLY \$15 EACH  
KING'S QUEST 1, 2, 3 -or- 4,  
HEART OF CHINA, RISE OF THE DRAGON, LEISURE SUIT LARRY 1, 2, 3 -or- 5, ZELIARD, QUEST FOR GLORY 1 -or- 2, POLICE QUEST 1 -or- 3, SPACE QUEST 1, 2 -or- 3.

### A-10 TANK KILLER, HEART OF CHINA & STELLAR 7 BUNDLE

ALL 3 SIERRA GAMES. \$30

### MORE SPECIAL DEALS

V for VICTORY: D-DAY, UTAH BEACH, STAR TREK'S FINAL FRONTIER ..... \$20  
SEX WIXENS FROM SPACE ..... \$14.50  
B.A.T. by UBI-SOFT ..... \$10  
NIGHT HUNTER, by UBI-SOFT ..... \$5  
MUTANOID WORD CHALLENGE ..... \$15  
MUTANOID MATH CHALLENGE ..... \$15  
MONTY PYTHON'S FLYING CIRCUS ..... \$5  
BATTLECHESS 2, by INTERPLAY ..... \$15

### COMPULT

P.O. BOX 5180  
SAN LUIS OBISPO, CA 93403

## Get Into CD-ROM from PC-SIG

**World of Windows CD-ROM \$19.95**  
Over 900 TrueType Fonts, 400 ATM Fonts, 10,000 icons 350 Shareware Windows applications.

Text and programs reviewed in July/August issue of Shareware Magazine also included..

**World of Games CD-ROM \$19.95**  
This new disk is jammed with over 550 games. Arcade, Adventure, Sports, Cards, Trivia, and more.

Articles and programs reviewed in May/June issue of Shareware Magazine also included.

PC-SIG 1030-D E. Duane Ave.  
Sunnyvale, CA 94086  
1-800-245-6717 or 408-730-2107 (Fax)  
VISA, MasterCard or COD

Circle Reader Service Number 250

## Computerize Your Home



### CONTROL & MONITOR

- Security SYSTEMS • Lights & Appliances
- Audio / Video EQUIPMENT
- Telephones & INTERCOMS

### HOME AUTOMATION LABORATORIES

5500 Highlands Pkwy, Suite 450  
Smyrna, GA 30082

Call 1-800-HOME-LAB for a FREE Catalog

# B. R. ROMS



## C D ROMS

ALL CATEGORIES

BUSINESS-GAMES-CLIPART-GRAPHICS  
RELIGION-EDUCATIONAL-HEALTH-  
LARGE ADULT LIBRARY (OVER 21)

### DISCOUNT PRICES

CALL FOR LATEST LISTINGS

1-800-757-7778

VISA-MASTERCARD-MONEY ORDER  
MOST ORDERS SHIPPED 24 HRS.  
P.O. BOX 216, LAFONTAINE, IN 46940

Circle Reader Service Number 121

## We need you.



American Heart  
Association

## They'll never know you're home based!

Appearance.



### Reality.

Introducing *SuiteTalker*, our revolutionary mini voicemail system for MS-Windows. Designed just for small and home-based offices, our software accepts mailorders, sends faxes or records messages from only \$1195. Even when you're working from a garage, you'll sound like a Fortune 500. Ask about our \$25 Opportunity Toolkit loaded with a variety of voice ventures!

Try our 24 hr demo! Record your voice! Call:  
818-718-9560

You'll get a \$5 rebate on your long distance call upon purchase. For live sales support, call 800 283-4759. All major credit cards accepted.



DemoSource<sup>sm</sup>  
The Voice Application Superstore

6345 Reseda Bl Ste 202 Northridge CA 91324 USA

Circle Reader Service Number 131

# COMPUTE CATALOG CORNER

## STONEHENGE VIEWPOINT



GLASTONBURY TREASURES	\$8.00
EXPLORING ROCK ART	\$8.00
STONEHENGE SCROLLS	\$8.00
CELTIC SECRETS	\$8.00
CROP CIRCLE SECRETS	\$8.00
FULL MEASURE	\$8.00
THE DIFFUSION ISSUE	\$8.00
AMERICA'S 1 <sup>ST</sup> CROP CIRCLE	\$8.00
MEGALITHIC ADVENTURES	\$8.00
THE ECLETIC EPIGRAPHER	\$9.00
THE LINEAR VISION	\$9.00

"The future is here, don't miss it!"

FREE Catalog, (805) 687-9350

STONEHENGE VIEWPOINT

2261 Las Positas Road, Dept. OM  
Santa Barbara, CA 93105



## Adam & Eve

Our fantasy-filled catalog, packed with sensual products, videos and more, is an arousing adventure not to be missed! Satisfaction guaranteed!

Over 3 million customers have enjoyed our discreet, shop-by-mail service for over 22 years. Send now for your **FREE** catalog and receive a 50% discount coupon and free video offer. Must be 21 years of age.

800-274-0333

Adam & Eve  
Dept. CMP2, P.O. Box 200,  
Carrboro, NC 27510.

## FITNESS 1+

GET IN THE BEST SHAPE OF YOU LIFE... in just 30 days! Power Fitness One's "Military Workout" will burn off your excess fat, increase your strength and stamina and give you a body to be proud of.

There's no need for expensive gym memberships or elaborate exercise equipment. All you need is the desire to improve the way you look, the way you feel and you can do it all in the privacy of your own home. Our program does the rest.

Our proven military style techniques are easy, fun and best of all... they work! The program is easily adaptable to each individual and everyone will enjoy the immediate results. Don't wait another day to experience the confidence and good health that you deserve! Order today! Send \$12.95 and \$2 p & h to:

**FITNESS 1+**  
2920 Ave R, Suite 357  
Brooklyn, NY 11229

## Learn By Video Tape

Learn Faster with Better Retention

### Windows 3.1

Get the most from your Windows Apps  
Learn Windows 3.1 Guaranteed\*



WindowsWire<sup>sm</sup>  
Complete Windows 3.1  
Video Learning System

INTRO OFFER

\*30 day  
money-back  
guarantee

\$29.95

EACH TAPE

Both Tapes for Only \$49.95

(Reg price is \$49.95 Each Tape)

Order #: 20-1, Vol. 1-Beginners-83 min. incl. Installation, Prog. Mgr, Write, Cardfile, Installing Windows Apps & much more.

Order #: 20-2, Vol. 2-Intermed. to Advanced-93 min. incl. File Manager, Paintbrush, Control Panel, PIF, OLE & much more.



SPECIAL BOOK OFFER This dynamic book on DTP, details proven methods for getting new customers. Any one of many foolproof ideas can make you thousands of dollars. Also reviews & recommends the best DTP hardware & software and gives you shortcut tips on how-to-incorporate your business. Your DTP business can't afford to be without this!

\$19.95

VISA  
MC  
AMEX

Call our 24-Hour Credit Card Hotline  
**1-800-243-1996**  
or send check to: Computer Wise Video  
P.O. Box 145-C1, Haworth, NJ 07641

Please add \$4. S&H-NJ Res. add 6% tax.

## For ad information or order placement

Please contact: Yvonne Marie, National, Direct Marketing Mgr. at: Phone 212-496-6100 Ext. 1542, 1543, Fax 212-580-3693 or write to Yvonne Marie c/o OMNI Magazine 1965 Broadway, New York, New York 10023-5965

www.commodore.ca

# CLASSIFIEDS

## BATTERIES

### COMPUTER BATTERIES & MORE

Sanyo, Tadren, Panasonic, Eveready, Gates, Lithium, Lead Acid, Ni-Cad, Alkaline & Chargers. We Stock batteries for laptop/notebook, Camcorders, cordless phones, drills, Norelco shavers, RC Cars & invisible Fence. Call & ask. Wholesale! MC/VI/PO

#### Battery Express

713 Gladstone St., Parkersburg, WV 26101  
1-800-666-2206 Fax: 304-428-2297

Circle Reader Service Number 317

## BUSINESS OPPORTUNITIES

### HOW TO MOONLIGHT WITH YOUR COMPUTER

Free Information. Must reading for everyone wanting their own business.

AICTC, Box 2615, Pasadena, CA 91102  
1-800-422-1722

WE'LL PAY YOU TO TYPE NAMES AND ADDRESSES FROM HOME. \$500.00 PER 1000. Call 1-900-896-1666 (\$1.49 min/18 yrs.+) or Write: PASSE-XC1 94, 161 S. Lincolnway, N. Aurora, IL 60542

\$975.00 DAILY POSSIBLE WITH A PC? YES! All from home, safe, easy! LOW COST manual reveals exact methods. Free details. CNB-COMPUTE, 153 Princeton Ave., Dover, NJ 07801

\$25,000 A YEAR PART TIME servicing computers. Easy to learn video training package. Free information, 1-813-528-2747 24hr recorded message.

MAKE \$95 PER HOUR  
doing simple computer repairs and upgrades.  
Complete training and marketing materials.  
For free information. 908-232-1007

## CABLE TV

### CABLE TV DESCRAMBLERS

Converters & Accessories  
STOP RENTING!!

SAVE MONEY! OWN YOUR EQUIPMENT  
All Major Brand Names • Lowest Prices!!  
FREE 30 Day Trial • FREE CATALOG  
Add-On Cable Co. 1-800-334-8475

Circle Reader Service Number 320

## CABLE TV

### DESCRAMBLERS

1-800-233-9388

FREE CATALOG

GUARANTEED BEST PRICES • IMMEDIATE SHIPPING

APPLE ELECTRONICS

3389 Sheridan St. • Suite 257  
Hollywood, FL 33021

Circle Reader Service Number 319

## FREE CATALOG

- CABLE T.V. BOXES - ALL TYPES •
- LOW PRICES • DEALER PRICES •

**ACE PRODUCTS**  
1-800-234-0726

Circle Reader Service Number 321

## CABLE TV

### ★★★★ PRESENTING ★★★★★ CABLE TV DESCRAMBLERS

★★★★ STARRING ★★★★★  
**JERROLD, HAMLIN, OAK**  
AND OTHER FAMOUS MANUFACTURERS

- FINEST WARRANTY PROGRAM AVAILABLE
- LOWEST RETAIL/WHOLESALE PRICES IN U.S.
- ORDERS SHIPPED FROM STOCK WITHIN 24 HRS.
- ALL MAJOR CREDIT CARDS ACCEPTED

FOR FREE CATALOG,  
ORDERS & INFORMATION **1-800-345-8927**

**PACIFIC CABLE CO., INC.**  
7325½ Reseda Blvd., Dept. 1117  
Reseda, CA 91335

Circle Reader Service Number 322

## CABLE TV

- Jerrold®
- Zenith
- Tocom
- Oak
- Hamline
- Pioneer
- Scientific Atlanta

EXCELLENT PRICES!

**1-800-826-7623**



3584 Kennebec, Eagan, MN 55122  
30 DAY TRIAL • 1 YR. WARRANTY

VISA MC AMEX DISC COD

Circle Reader Service Number 318

## CABLE TV CONVERTERS

Why Pay A High Monthly Fee?  
Save \$100's A Year

- All Jerrold, Oak, Hamlin, Zenith, Scientific Atlanta, and more.
- 30 Day Money Back Guarantee
- Shipment within 24 hours
- Visa/MC and C.O.D.

No Illinois Orders Accepted

Purchaser agrees to comply with all state and federal laws regarding private ownership of cable TV equipment. Consult local cable operator

### L&L ELECTRONIC ENGINEERING

1430 Miner Street, Suite 522  
Des Plaines, IL 60016

Free Catalog 1-800-542-9425  
Information 1-708-540-1106

Circle Reader Service Number 323

## COMPUTER REPAIR

AUTHORIZED COMPUTER REPAIRS: C64/128, 1541/1571, SX64, 128D & Amiga. Selling DTK-comp computers. Quick service-30 day warranty  
MOM & POP's Computer Shop, 114 N. 16th, Bethany, MO 64424 (816) 425-4400

Closing date for February classifieds  
is November 15.

Call/Fax your ad (516) 757-9562

## COMPUTER KITS

PC-BUILD COMPUTER KITS, THE RECOGNIZED LEADER in build-it-yourself PC's. Rec'd by PC-Upgrade and Pop. Science. Used in schools and training programs nationwide. Free catalog 1-800-798-6363

## GAMES/ENTERTAINMENT

### WORD-PUZZLE CONTESTS

\$5 brings schedule and samples.

Vanity Lock, Box 129, Genoa City, WI 53128  
U.S. residents only—void where prohibited

## MARKETING

### EVTEK

Evolved Technologies represents proprietary computer software/hardware solutions to the scientific, business and industrial community of the North East. 609-859-8333

## MISCELLANEOUS

### SKELTON KEY

#### FITS MOST LOCKS

(bollocks, doorlocks, & some padlocks)

Amaze Your Friends

With A Lock Picking Demonstration.

You get 3 sized metal tension keys, the slide

pick, precise instructions & more. Note: this

device is to be used for demonstration

purposes only! Satisfaction Guaranteed or

Full Refund; 2 weeks delivery.

To get this exciting device, Send Now ONLY \$8.95 + \$2 S&H to:  
Safe Marketing \* 90 W. Montgomery Av No.366E \* Rockville Md 20850

## VOICE CHANGER TELEPHONE



### SIXTEEN DIGITAL

### VOICE CHANGING

### MODES are built into this

standard desktop tele-

phone. Change your voice

from male to female, female

to male, adult to child, child

to adult & "cartoon" voices.

Use as regular voice phone or switch to

Voice Change Mode (lighted mode indicator). Tone/

pulse, last number redial, hearing aid compatible, FCC

registered, UL & CSA listed, warranty. Precise & realistic

voice masking is ideal security for women & children

home alone, as a home/business "screening" device, and

discourage annoying callers. Money back guarantee,

\$89.00 (each add'l \$80.00) + \$5.00 shipping per address.

DutchGuard, Dept. CP1, P.O. Box 411687, Kansas

City, MO 64141. Send Checks/money orders or MC/

Visa & COD order TOLL FREE (800) 821-5157.

Circle Reader Service Number 324

COMPUTE Classified is a low-cost way to tell over 275,000 microcomputer owners about your product or service.

Additional Information. Please read carefully.

Rates: \$40 per line, minimum of four lines. Any or all of the first line set in capital letters at no charge. Add \$15 per line for bold face words, or \$50 for the entire ad set in bold-face (any number of lines.)

Terms: Prepayment is required. We accept checks, money orders, VISA, or MasterCard.

General Information: Advertisers using post office box number in their ads must supply permanent address and telephone number. Orders will not be acknowledged. Ad will appear in next available issue after receipt.

### CLASSIFIED DISPLAY RATES

Classified display ads measure 2 1/4" wide and are priced according to height. 1" = \$265, 1 1/2" = \$420, 2" = \$550

### HOW TO ORDER

Call Maria Manaser, Classified Manager, COMPUTE, 1 Woods Ct., Huntington, NY 11743, at 516-757-9562.



# CLASSIFIEDS

## POSITION WANTED

**HOME TYPISTS,**  
PC users needed.  
\$35,000 potential. Details,  
Call (1) 805 962-8000 Ext. B-30033

**EASY WORK! EXCELLENT PAY!**  
Assemble Products at home.  
Call Toll Free  
1-800-467-5566 EXT. 11315

## SHAREWARE

### SHAREWARE SALE

Free catalog. Over 3000 programs.  
High quality, low price + bonuses  
DATA MATE, PO Box 2811, Dept. B  
Lake Ronkonkoma, NY 11779

Circle Reader Service Number 325

### FREE IBM SHAREWARE CATALOG!!

Latest programs--low as \$1.99 per disk--ASP vendor.  
Games--business--Windows--spread sheet--and more!  
Call Nibbles & Bits Software at 202-563-2359

**IBM & COMMODORE SHAREWARE 18 areas**  
Education, Business, Adult. .99 per disk. Free catalog. Robofx graphic BBS 4 gigs on-line 614-871-5055. Personalized hard backed Books \$9.95, (20) different titles. H.O.S. P.O. Box 282008, Cols, OH 43228 614-863-4484 Visa/MC accepted

## SOFTWARE

**BEST VALUE - IBM-APPLE SHAREWARE & PD**  
CHOOSE FROM OVER 1000 DISKS.  
FREE CATALOG OR \$2.00  
FOR CATALOG/DEMO (SPECIFY COMPUTER)  
MC/VIS ACCEPTED. NEXT DAY SHIPPING AVAILABLE  
CHRISTELLA ENTERPRISE, P.O. BOX 82205  
ROCHESTER, MI 48308-2205

Circle Reader Service Number 326

### Computer Shareware/ASP Vendor

FREE ON-DISK-CATALOG\*FREE Disk Offers  
We also carry CD-ROM  
IkeaMo Ent., 0255W 300N, STE 11, Howe, IN 46746  
Voice 219-463-5246 Fax 219-463-8454

### ADULT-ORIENTED SOFTWARE

For IBM VGA, Color Mac, and Amiga.  
Check out our huge collection of  
X-citing Adults Only Software.  
Free lists (You must be over 18).  
CLEARLIGHT SOFTWARE, Dept. CO  
P.O. Box 1411, Milwaukee, WI 53201  
(414) 962-2616

Circle Reader Service Number 327

IBM - COMMODORE 64 & 128 - AMIGA  
1000's of PD/Shareware programs on 100's  
of disks. Free listing or \$1 for large  
descriptive catalog (specify computer).  
DISKS O'PLENTHY INC., 8362 Pines Blvd.,  
Suite 270B, Pembroke Pines, FL 33024

## SOFTWARE

The **ONLY** Lottery Systems With  
**PROVEN JACKPOT WINNERS**  
are those in Gail Howard's  
**SMART LUCK® SOFTWARE**  
Call Toll-Free 1-800-876-G-A-I-L.  
(See Her Ad in Product Mart.)



Circle Reader Service Number 328

## UNIQUE SOFTWARE!

Outstanding IBM software selected  
specially for Home and Office use.  
• 1000's of programs • ASP Member •  
• Lowest Prices Anywhere! •  
• Money-Back Guarantee! •  
• FREE DETAILED CATALOG •

**THE PC ARCADE**  
14 Moreland Ave., Oakville, CT 06779

Circle Reader Service Number 329

WITH EMISOFT'S PASSWORD BYPASSER YOU  
eliminate annoying passwords. Disk Volume 1 only  
\$34.95, or purchase separately only \$5.00. Min of two  
per order. Call today 813-841-8769. **FREE S/H**

BUY/SELL USED SOFTWARE! LOWEST PRICES!  
FREE LIST. Specify 64/128, Amiga or IBM, Centsible  
Software, PO Box 930, St. Joseph, MI 49085.  
Phone: 616-428-9096 BBS: 616-429-7211

### FREE! IBM PD & SHAREWARE DISK CATALOG

Low prices since 1988! ASP Approved Vendor. Finto  
Software, Dept. M. Rt. 2, Box 44, Rosebud, TX 76570  
or Voice/FAX (817)583-2151. VISA/MC accepted.

**NOT JUST SOFTWARE, ICA SOFTWARE**  
100's OF IBM AND IBM COMPATIBLE SOFTWARE  
**FREE CATALOG, VOICE/FAX 800-331-3065**  
P.O. BOX 1011-354, TRUMBULL, CT 06611

\*\*\*FREE CATALOG-48 PAGES 2800+ PROGRAMS\*\*\*  
IBM COMPATIBLE-100% VIRUS FREE-NO MINIMUM  
NO GIMMICKS-ALL CATEGORIES+ ADULT  
**\$.99 PER (5.25) DD PH. TOLL FREE 1-800-755-6795**  
HG SHAREWARE, P.O. BOX 515, EAGLE CREEK, OH 97022

## IBM SHAREWARE

Free catalog or \$2 for sample & catalog (refundable). Specify computer.  
CALOKE IND (B), Box 18477,  
Raytown, MO 64133

Circle Reader Service Number 330

## EDUCATION

### TEACH YOUR KIDS AT HOME

or find out how 50,000 homeschoolers do it—in **PRACTICAL HOMESCHOOLING!** Hands-on teaching tips for computer education, classical ed, Charlotte Mason method, accelerated learning, more! How-to articles, product reviews, prizes! \$15/4 big, glossy issues, or \$25/8 issues. Back issue, \$5. Call Home Life at **1-800-346-6322** or fax (314) 343-7203 to order. Satisfaction Guaranteed!



Circle Reader Service Number 331

## EDUCATION

### EARN DEGREE AT HOME

- Earn BS/MS/MBA degree via home study
- Instructional VIDEOTAPES
- Business Administration
- Environmental Studies
- Computer Science

For free  
catalogue call:  
1-800-767-2423

**CHADWICK UNIVERSITY**

Member of World Association of Universities & Colleges  
"Learning not limited by classroom walls"

Circle Reader Service Number 332

## DON'T SPEND ANOTHER DIME

on educational software, until you get **PRIDES' GUIDE TO EDUCATIONAL SOFTWARE!** The only book to categorize, rate and review 750+ of all the latest programs. **PC Magazine** (5/11/93) says, "Buy it!" You'll save the \$27.50 (ppd.) price again and again! Call Home Life at **1-800-346-6322** or fax (314) 343-7203 to order. Satisfaction Guaranteed!



Circle Reader Service Number 333

## B.S. & M.S. In Computer Sciences

- In-depth degree programs with all courses home study
- BS courses include MS/DOS, BASIC, PASCAL, C, Data File Processing, Data Structures & Operating systems.
- MS courses include Software Engineering, Artificial Intelligence and much more.

For free information call **1-800-767-2427**  
2101-CC Magnolia Ave. S. • Suite 200 • Birmingham, AL 35205

**AMERICAN INSTITUTE COMPUTER SCIENCES**

Circle Reader Service Number 334

## Be a computer repair expert!



Home study. You could earn great money troubleshooting, repairing, upgrading, and installing PCs. Send or call now for free career literature.  
**800-223-4542**

Name \_\_\_\_\_ Age \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
**The School of PC Repair**  
6065 Roswell Rd., Dept. JA680  
Atlanta, Georgia 30328

Circle Reader Service Number 335

**LEARN COMPUTERS!**  
Home study. Become a personal computer expert at home and in business. Free career literature.  
**800-223-4542**



Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**THE SCHOOL OF COMPUTER TRAINING**  
2245 Perimeter Park  
Dept. KA680 Atlanta, Georgia 30341

Circle Reader Service Number 336

# NEWS BITS

Jill Champion Booth

**A shortage of parts, a distaff online service, E-mail to the chief, and more**

## Don't Hold Your Breath

President Clinton says he hopes to be able to answer electronic mail messages individually within a year—this in response to a new exhibit, Letter to the White House, at the Computer Museum of Boston. Visitors can access President Clinton and Vice President Gore electronically to tell them what they think about, well, everything. The exhibit also allows you to see how your message is routed through the Internet's web of machines. Computer animation and other special effects display a simulated satellite view of the message as it bounces from the museum to a gateway in Boston and then through cyberspace to Washington and the White House. Once your message is received, you get a printout with Clinton's and Gore's E-mail addresses.

## Women Get Wired

Women's Information Resource & Exchange (WIRE), the first international, interactive computer network dedicated to women, plans to open its gateways early this year. The network will provide an easily accessed, centralized source of women-oriented information and conversation. Women and men can log on to WIRE and discuss topics of interest with each other, network to solve problems, access information instantly, keep in touch with family and friends via E-mail, and participate in news groups and mailing lists from other systems on the Internet. For more information, contact WIRE at (415) 615-8989 or send E-mail to info@wire.net.

## Mobile Companions

Moving swiftly to capture the most promising market for hand-held computing devices—the business user mar-

ket—VLSI Technology, Intel, Microsoft, and Compaq will work together to deliver the first of a new class of hand-held devices known as mobile companions. Designed by Compaq, the mobile companion is a true extension of your main desktop or notebook PC. You'll be able to carry it wherever you go and use it off and on throughout the workday for instant access to information, whether at a meeting down the hall or on the other side of the world. Scheduled to be on the market this year, mobile companions will be powered by VLSI's Polar chip set, which is based on Intel architecture, and will use the Microsoft at Work operating system for hand-held devices. While Compaq's mobile companion will be the first of its kind, other companies are expected to build similar devices based on the same technologies.

## Nike Reaches an Apex

Nike may have lost some air from its pumps when Michael Jordan, the company's most famous endorser, stepped out of his Air Jordans and off the basketball court for good, but the sportswear company still keeps its sales force moving and the shoes flying with IBM ThinkPad portable computers equipped with Apex Data modems.

What made Nike choose Apex over other fax/data modems? High speed, for one thing, says Ron Edwards, Nike's director of sales operations, but also because the Apex modems are covered under the IBM service guarantee. "We have reps in obscure parts of the country, and we know that any problems with Apex products will be fixed by simply calling IBM's service number." Another plus: The fax/data modems are compatible with the

ThinkPad's "hibernate" feature, which allows you to change a battery on the fly. "The fact that Apex modems don't interfere with this is important," says Edwards.

## It Could Be a Long Wait

That's the word from one OEM based in Newark, New York, that is also a major supplier of component parts to the PC industry (including Compaq, Dell, IBM, and Tandy). Roger Main, president of IEC Electronics, says consumers who are waiting for prices to drop before they buy the newest technologically advanced PCs might want to think again. He believes that prices of computers will hold steady for a while, not drop, because of a massive shortage of integral computer parts. In other words, newer models using the most advanced technology won't be available to consumers as quickly as usual. What is the reason for the delay? In the past, parts manufacturers rushed to keep up with demand but ended up overstocked with unsalable, out-of-date parts due to fast-paced technology advances. Overseas suppliers refuse to make the same mistake again, he says, and that has resulted in the shortage.

## Not For Profit

Second Nature Software is providing an extensive collection of high-quality art for Windows users, beginning with 30 screen-saver/wallpaper collections of professional art and photographic images. All profits or ten percent of sales, whichever is greater, will be donated to nonprofit organizations.

For more information, contact the company at 812 Southwest Washington Street, Suite 1050, Portland, Oregon 97205; (503) 291-9500. □



# Give a **COMPUTE** Holiday Gift Subscription!

First gift only \$14.97

Save **57%** off the newsstand price

**Save 63%** Each additional gift is only \$12.97

Payment enclosed

Bill me

Charge

Visa

MasterCard

ACCOUNT # \_\_\_\_\_

EXPIRE DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

Please allow 6-8 weeks for delivery of first issue. Canadian orders send \$26.72 for the first gift, \$24.58 for each additional gift (includes GST). Other foreign orders send \$24.97 for the first gift, \$22.97 for each additional gift. Payment acceptable in U.S. funds only. Regular subscription price for 12 issues is \$19.94.

YRLP5

**Send first one year gift to:**

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

**Send second one year gift to:**

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

**From:**

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

Please send me a subscription also.

[www.commodore.ca](http://www.commodore.ca)



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

---

**BUSINESS REPLY MAIL**

FIRST CLASS MAIL

PERMIT NO. 112

HARLAN, IA

---

POSTAGE WILL BE PAID BY ADDRESSEE

**COMPUTE**

P.O. BOX 5052

HARLAN, IA 51593-2552



 [www.commodore.ca](http://www.commodore.ca)