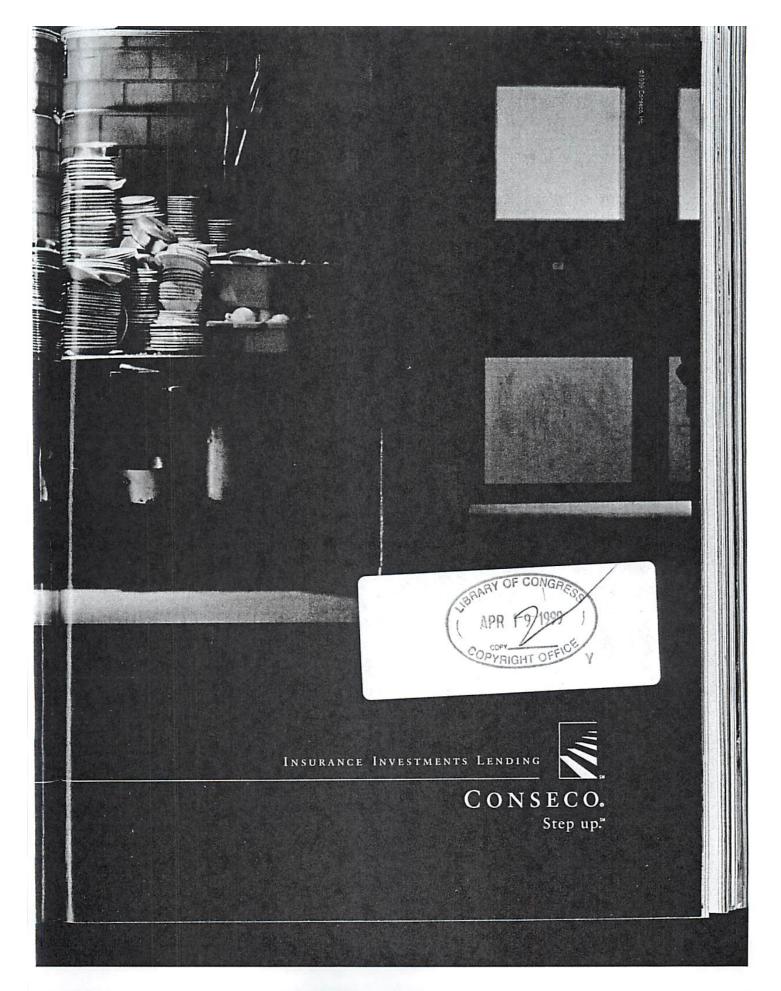
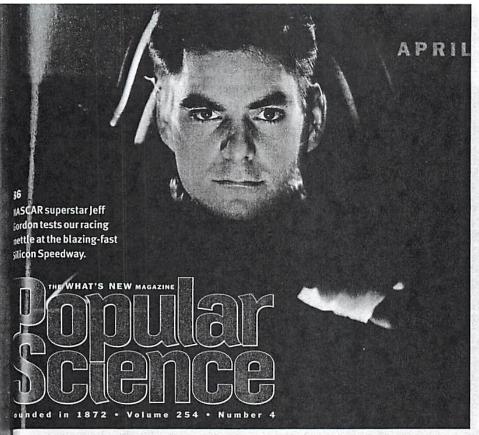
THE WHAT'S NEW MAGAZINE SPEED DEMONS: 500MHz PCs ew Laser Weapons efend from Space LAB. WR.PS 19516886 PS4110 MS BARBARA RINGER BRANCH MANAG 000127 UNITED STATES SENATE LIBRARY CONGRESS COPYRIG 101 INDEPENDENCE AVE SE WASHINGTON DC 20559-2002





1999

COVER ART DON FOLEY Inset: JOHN B.



- 16 WHAT'S NEW Water-resistant poolside TV; Lexus gets sporty.
- **10** LETTERS
- 14 MILLENNIUM SPECIAL Our monthly countdown to 2000 highlights the greatest audio and video inventions.
- 93 FYI Internet search engines; monster trucks.
- 96 CLASSIFIEDS
- **108** LOOKING BACK

#### SCIENCE & TECHNOLOGY

- 33 Science & Technology Newsfront Why termites are fickle lovers; pharmacy on a chip; extra-furry mice.
- 56 COVER STORY Return to Star Wars The U.S. military is quietly developing orbiting laser weapons.
- 70 What's Really Causing Gulf War Illness? One man's dogged research points to an unusual suspect.
- 78 Was It Murder? A modern-day Sherlock Holmes is scientifically probing mysterious, high-profile deaths.

#### ELECTRONICS

53 Electronics Newsfront Computer chips and displays made of diamonds; high-definition DVDs.

#### HOME TECHNOLOGY

- 45 Home Technology Newsfront Nipping water leaks in the bud; tractors go automotive.
- 76 Yard Tamers A new crop of power tools makes yardwork less like work and more like-dare we say it?-fun.

#### AVIATION & SPACE

62 A Rival for the F-22 Known as the Raptor Killer, Russia's new MiG fighter faces an uncertain future.

#### COMPUTERS & SOFTWAR

- 47 Computers & Software Newsfront No-fuss digital photo printers; tax software with a personal touch.
- 64 500MHz Marvels Need more speed? Intel's latest chip fires up a new fleet of ultrafast computers.

### AUTOMOTIVE

39 Automotive Newsfront It's a spaceage rocket. No, it's a retro classic. No, it's a hot rod.

#### MOTORSPORTS: 1999 RACING SEASON PREVIEW

- 82 A Season for Safety New rules for the top three venues strive to keep the driver alive.
  - 86 He's Got Game NASCAR champion Jeff Gordon's passion fuels a hot new racing game.



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EDITED BY SUZANNE KANTRA KIRSCHNER

Research by Becky Orfinger

## Shoulder-Mount Telescope

YOU CAN REST the 3.5-pound Evolution telescope on your shoulder instead of a tripod and still get jitter-free bird watching at magnifications as great as 50X. With its huge 120mm aperture, the telescope lets you survey the surrounding area well into dusk. A quick-release mechanism switches from a macro lens, which focuses at 18 feet, up to a 200X magnification lens, which does require a tripod. Price: approximately \$2,300. Cape Instruments Ltd., 63 Featherston Dr., Burbage, Leicestershire LE10 2PW England.



#### Rock Garden

A FOSSIL FOUND on a forest floor in China has recently been identified as the remains of the world's oldest flowering plant. The scientists who discovered it, one from the Institute of Geology and Paleontology at the Academia Sinica in China and another from the University of Florida, estimate that the plant



flowered more than 140 million years ago. It predates the previous oldestknown flowering plant by more than 25 million years.



### For Z Zealots

THIS CONCEPT CAR, which is strikingly similar to Nissan's early generation Z coupes, reveals the latest plans for a revival of the popular low-cost, highperformance Z sports car. While the final chassis and engine are not set yet, a four-cylinder powers the concept. Pricing is anticipated to be in the \$25,000 range, but Nissan hasn't committed to the project.

16

APRIL 1999 Selente



## Digital Audio Plus

SAMSUNG'S YEPP MODEL YP-D40 is more than an MP3-format digital audio player—it's also an FM radio and voice recorder. The \$199 unit comes with 24MB of memory plus a 16MB smart media card for audio storage, and runs 6 to 8 hours on two AAA batteries. An optional \$150 recording station lets you record from CDs without a PC. www.yepp.co.kr



# **Sport-Utility Watercraft**

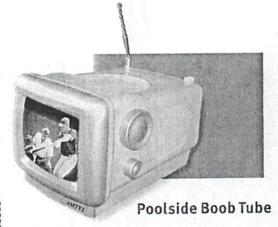
WANT TO DO MORE with your personal watercraft than cavort near the shore? Yamaha's SUV1200, touted as the first sport-utility vehicle for the water, is built for the longer haul. Two feet longer than any other such craft and packing 116 gallons of storage space, the SUV1200 can transport as many as four people and camping gear to, say, a nearby island for an overnight jaunt. Sold with its own trailer for \$8,999. www.yamaha.com

# **Body Heat Energizes Watch**

LOOKING FOR A HOT TIME? The Seiko Thermic is the first watch powered by body heat, which it converts into elec-



power is diverted to a storage cell that keeps the watch ticking for as long as 10 months, even while it's off your wrist. When you doff the watch, the second hand moves in a direction that indicates how much power is left. Price: approximately \$2,600. Available only in Japan.



GO AHEAD, set this little television next to the pool so you don't miss your favorite shows while you soak. Amtel's black-and-white 1800 is the world's first water-resistant TV. The 5-inch set will be available in May. Price: \$70. Amtel International, 71-3 Veronica Ave., Somerset NJ 08873.

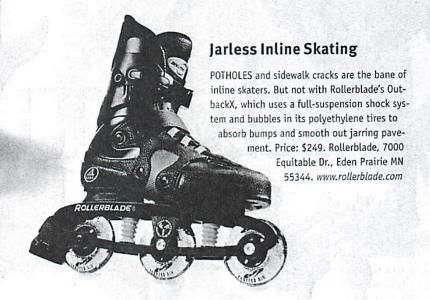


APRIL 1999



## Handheld Vaporizer Is Nifty Nebulizer

INFANTS AND CHILDREN WHO SUFFER from asthma, bronchitis, and other respiratory ailments have had to rely on a breadbox-size device in which the medication they inhale has been vaporized. More convenient and less intimidating, Omron's MicroAir is the first lightweight, battery-powered medical-vapor dispenser, or nebulizer. Weighing 8 ounces, the baby-bottle-size device is one-third the size of other nebulizers. Price: \$400. Omron Healthcare, 300 Lakeview Pkwy., Vernon Hills IL 60061. www.omron.com/ohi



## **World Wireless**

WORLD TRAVELERS can easily keep in touch via phone and e-mail with Ericsson's I 888 world phone. The 6.3-ounce GSM phone operates at 1,900 MHz, the U.S. standard, and 900 MHz in the 119 countries that require that frequency. It has a built-in infrared modem. To dial out, simply place the phone so its infrared port faces that of a laptop or PDA. Price depends on service provider.

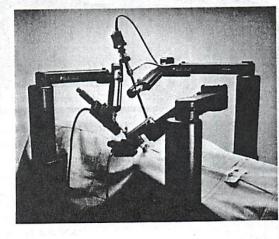
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# Gentler Heart Surgery with Robotic Aide

THREE INCISIONS LESS THAN HALF AN INCH THICK are all a doctor requires to perform heart surgery with the Zeus surgical system. Its robotic arm threads a tiny camera through one incision and lets the surgeon maneuver a pair of surgical instruments through the other two cuts. Tissue

resistance is measured and fed back to the surgeon's hands as tactile sensation, enabling shake-free cuts and sutures. Clinical trials in the United States may take two years or more. Computer Motion, 130-B Cremona Dr., Goleta CA 93117.





## Beetles with Plenty of Juice

VOLKSWAGEN'S seemingly ubiquitous New Beetle gets a 1.8-liter turbocharged four-cylinder engine generating 150 horse-power this fall. But even more muscular is the RSI concept model (right), powered by a turbocharged V6 that is rumored to generate in excess of 200 horsepower, feeding a six-speed manual transmission. The comical-looking rear spoiler (inset) has the very real function of helping to keep the speedy Beetle firmly on the ground.



## Easy-Grip Circular Saw

WHETHER YOU'RE cutting thin paneling or 2³/s-inch lumber, the Milwaukee model 6390 circular saw's cushioned grip adjusts for comfort, moving independently of the fixed front palm handle to any of eight positions. Weighing a mere 11.7 pounds, the \$139 saw gets a hefty 3.25 horsepower from its 15-amp motor. The saw is available this month. www.mil-electric-tool.com

#### **Wave Slicer**

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THE U.S. NAVY and Lockheed Martin designed the 105-foot Slice to operate at speeds of up to 30 knots in high seas that normally paralyze small vessels. Slice's stability comes from four torpedo-shaped pontoons that ride beneath the waves. The boat will be used to resupply helicopters and unmanned aerial vehicles, sweep for mines, and engage in special operations.

#### **GPS on Your Wrist**

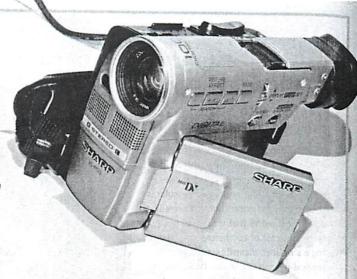
WITH CASIO'S GPS, checking your location is as easy as glancing at your wrist. The watch displays the longitude and latitude of your current position, or the direction and distance to a preset location. The 5.2-ounce watch measures 2.6 by 2.6 by 1.1 inches and is 60 percent the size and weight of conventional handheld units, says the company. Available this spring; the price is not yet set.



Popular Science APRIL 1999

### Small Svelte Shooter

ONE OF THE SMALLEST and lightest digital camcorders to date, Sharp's new ViewCam VL-PD3U fits in your palm and weighs just over a pound. Yet it has a large, 2.5-inch color LCD viewscreen and a 10X optical (100X digital) zoom lens, and records with digital clarity on DV tape. A 1394 (a.k.a iLink) port connects the camera to a PC. Price: \$1,599. www.sharp-usa.com



# **Power Biking**

HOW LONG can you power a
100-watt lightbulb? Find out
with Tune Corp's PowerTap cycling computer,
which converts the
energy used during
bicycling into watts.
A common feature on
exercise bikes, the
device is the first that

enables on-the-road cyclists to measure their training by power output. PowerTap comes with a hub, power sensor, and display that shows time, speed, and distance. It can be affixed to any bike. Price: \$750. Tune Corp., 2107 Massachusetts Ave., Cambridge MA 02140. www.etune.com



### **Tailored Clubs**

WHEN IT COMES to golf clubs, one design doesn't fit all. So Taylor Made crafted each Firesole club with materials best suited to the job. For instance, the 3 and 4 irons have tungsten lining the club head's bottom for added weight, while the 7 iron has steel for more tactile feedback. The driver (shown) has a copper and tungsten weight on the bottom. Drivers are \$399; the iron set is \$999. www.taylormadegolf.com

## A Sporting Touch

CURRENTLY available only in Japan and Europe, the Lexus IS sedan is coming to the United States in mid-2000, adding a sporty look to the Lexus lineup. It will have an inline six-cylinder engine placed behind the front axle for better weight distribution. The sedan is rear-drive with an independent suspension. Pricing has not been announced but is expected to start in the mid-\$20,000s.



APRIL 1999 Science

Car-Hopping Navigator

MOST GPS navigators must be integrated into a car's electronics to cross-refer-

Your E-Mail

WRITE A LETTER to a friend by hand and then e-mail it with British Telecom's SmartQuill pen. The device, now in prototype, translates your hand movements into ASCII characters. Then view what you've written on the pen's builtin display, which uses magnification for the effect of a 7-inch screen. Four times as heavy as a conventional pen, SmartQuill connects to a cellular phone or modem. British Telecom Labs, Mertlesham Heath, Ipswich IP5 3RE England.

## Weather-Wise Radio

WITH COBRA'S FSR-310WX two-way radios, you can shoot the breeze with your buddies and let them know if a breeze is headed their way. Cobra's are the first family radio service units to include a National Oceanic and Atmospheric Administration 10-channel weather receiver, which provides continuous local weather, emergency, and disaster information. Available in June for \$150. Cobra Electronics, 6500

W. Courtland St., Chicago IL 60707.



## Monitor for All Reasons

YOU'RE SET FOR ANY DISPLAY MEDIUM with Princeton Graphic Systems' AF3.0HD: It is the first monitor that displays HDTV, regular TV, and XGA computer graphics. The 30inch monitor uses a line doubler to increase the resolution of regular TV signals. Price: \$6,995. Princeton Graphic Systems, 2801 S. Yale St., Santa Ana CA 92704. www.prgr.com





## Speedy 'Copter

CAPABLE OF cruising at 180 mph, a speed that would cause other helicopters to shake uncomfortably, Sikorsky's S-92A Helibus ["Choppers to the Rescue," June '98] flew for the first time early this year. The helicopter carries 19 passengers in a cabin tall enough for them to stand upright; cargo is loaded through a ramp in the back. www.sikorsky.com

## **Mighty Mouse**

FUJITSU'S SCROLLPAD GOES ONE BETTER than your everyday computer mouse: In between the usual two control buttons sits a small touchpad for scrolling through documents. Tap once to move a single step left, right, up, or down. Or use a smooth, sliding movement to scroll. The Scrollpad mouse costs \$35. www.fujitsu.takamisawa.com



# Robo Vac a Spud's Delight

COUCH POTATOES will soon have one more way to increase lounging time: Set down in any room, the Eureka Robot Vac, now in prototype, will vacuum the entire area on its own. The 15-inch round vacuum cleaner uses radar to avoid obstacles as it crisscrosses the floor. It runs for an hour on its rechargeable battery. The Eureka Co., 1201 E. Bell St.,

Bloomington IL 61701.



## Spider on the Fairway

A SPIDER, WITH ITS THIN EXTENDED LEGS, is highly adapted to traversing its silky web. Softspikes' Black Widow, a new entry among nonmetal golf cleats, aims to do something similarits eight spikes flex independently for the best grip. Price (set of 24): \$12. Softspikes, 1901 Research Blvd., Suite 350, Rockville MD 20850. www.softspikes.com

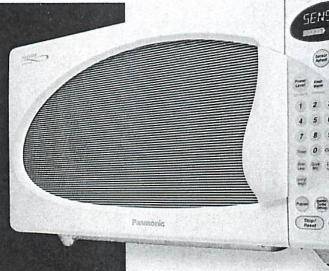
26

APRIL 1999 Schiler



## Microwaves That Simmer

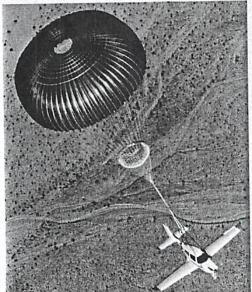
CONVENTIONAL microwave ovens use a transformer and magnetron to produce one level of cooking powerhigh. For low and medium power, these ovens cycle that high power on and off. Now Panasonic's new microwave ovens use an inverter to create a constant level of microwave output, ranging from low to high. With constant power, the microwave can keep food warm or at a simmer. Price: \$160 to \$220.





## Mini Music Machine

THE WORLD'S SMALLEST AND LIGHTEST MiniDisc player/recorder, Sony's MZ-R55 measures all of 31/4 by 31/4 inches. The 5.2-ounce unit features a 40-second buffer and gets 16 hours of playback from a nickel-metal-hydride battery plus two AAs. Price: \$350. www.sony.com



## Four-in-One Fastener

STANLEY'S Pro SharpShooter requires 30 percent less force to operate than other nailers and staplers, for easier nailing. The \$27 tool drives five staple sizes, 1/2-inch nails, and 1/4-inch nails. And with an included attachment, it can tack cable and fasten screens. The Stanley Works, 1000 Stanley Dr., New Britain CT 06053. www.stanleyworks.com



EW

## Parachute Plane

THE CIRRUS DESIGN SR20 recently became the first plane with its own parachute to be approved by the FAA. During an emergency, the pilot can pull a handle to release the chute. The 55-foot-diameter apparatus will lower the plane to the ground, improving the odds of surviving for the pilot and up to three passengers. Price: \$169,000. Cirrus Design, 4515 Taylor Circle, Duluth MN 55811. www.cirrusdesign.com

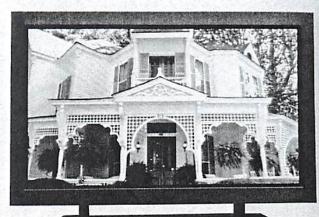


APRIL 1999

## Turn on the Gas Plasma

THOMSON'S ProScan PS50100W TV signals that gas-plasma screen technology is ready to handle the high-resolution demands of digital television. This 50-inch-wide, 1,365- by 768-pixel screen is only 4 inches deep. Available this fall; price not yet set. Thomson Consumer Electronics, 10330 N. Meridian St., Indianapolis IN 46290.

REA



## **Customized Commuter Radio**

YOU SAY YOU WANT traffic every 5 minutes and stock quotes every hour during your commute? You've got it with an RCA Command Audio wireless receiver. It stores up to 6 hours of programming. A basic \$15-per-month subscription covers content from National Public Radio, ABC News, and others. Price: \$199. www.commandaudio.com

## Hard-Driving Satellite TV

ECHOSTAR'S 7100 is the first satellite TV receiver with a built-in hard drive—pause a show for as long as 30 minutes before picking it up where you left off, and record high-quality digital video for 8 hours. Web TV hardware, plus a \$25 monthly fee, provides access to the Internet and your own e-mail account. Price: \$499.

www.echostar.com

# **Hybrid Runs Lean**

WHEN IT DEBUTS this fall, the Honda VV is expected to be the first hybrid-drive vehicle on sale in the United States.

The two-seater should achieve about 70 mpg in combined city and highway driving. The powerplant is a leanburn 1.0-liter three-cylinder, aided by an electric motor/generator that provides additional pickup and recaptures some of the braking energy. The anticipated price is less than \$20,000.