Are Photos Finished?

Digital makes memories easier to capture and share—but harder to hold on to

BY DAVID LAGESSE

Snapshooters tend to become evangelists once they've gone digital. Renee Reid, for example, abandoned film a couple of years ago for a digital camera and started printing all her pictures at home. She so loved the new ease of capturing her young Mississippi family's visual history that she bought a camera last Christmas for her mother. Her brother, smitten with his own digicam, also bought one for Mom. Reid's father, watching the two kids happily shoot without film, was getting ready to buy a third. In the end—after some awkward scenes and gift returns—digital had made another convert. "Mom got her digital camera and has had a ball," says Reid.

Digital cameras are no longer an exotic toy for early adopters and computer buffs. Already, 1 in every 5 American homes has a digital camera, and the number could approach 1 in 3 by year's end as sales accelerate—digital models, though more expensive than film cameras, are now outselling them.

The digital revolution goes far beyond capturing images on electronic sensors instead of a film's chemical emulsion. Digital means entirely new ways of keeping and sharing photos, and that is changing the business of photography and the role of photos in

SEIZE THE MOMENT. Alisha Pitchford of Tucson takes a digital photo of her kids. Families snap far more pictures when they switch from film to digital.

DAVID BUTOW—CORBIS SABA FOR USN&WR

Copyright ©2003 by U.S. News & World Report, Inc. (March 24, 2003 Issue)

family ties and friendships. By freeing users from having to buy and process Kodak or Fujifilm rolls, digital means consumers take more pictures but print fewer of them, threatening the bread-and-butter income of the nation's film manufacturers and myriad corner drugstores and one-hour photo labs. Instead of passing around prints and pasting them into albums, digital converts send their pictures by E-mail or even cellphone and display them onscreen, adding throw-away frivolity to the once elevated role of photos in our personal histories.

But this revolution, like most of its kin, has its costs. It has left all too many Americans with hard drives stuffed with family memories in digital form. They may have sent the files to a Web site or to relatives, but there the images remain, locked in the ethereal zeroes and ones of computer code. It's "digital constipation," says Douglas Rea, who teaches photography at the Rochester Institute of Technology. Maybe 14 percent of digital pics get printed, compared with virtually all film frames, says the Photo Marketing Association. Those that make it to paper mostly do so at home, and almost entirely by way of inkjet printers. They produce vivid colors that thrill consumers, but the delight often proves short lived as tones begin fading or discoloring in a few years, or even months.

And there's the biggest downside of the digital revolution: It threatens the longevity of photos. Taking and sharing digital images can be a snap, but keeping them requires some know-how. Unless digital's new devotees learn how to organize, preserve, and print their images, photography experts worry, a generation's worth of memories could be lost.

LASTING IMPRESSIONS. Prints from digital images fill the Pitchford family album.

DAVID BUTOW—CORBIS SABA FOR *USNWR*

Fade to black. For a full century, since Eastman Kodak popularized photography in the early 1900s with its $1 Brownie camera, it was film that captured family stories, filling albums with glimpses of cherished moments that were passed lap to lap at reunions and parties. Now there's a headlong rush to entrust memories to a technology whose purveyors are often new to photography. Sure, photo stalwarts like Kodak and Nikon offer digital cameras, but computers and computer printers shoulder the job of turning the electronic impressions into images. The result is new control and at-home convenience, but at the cost of some old certainties. "We're squeezing what is a generational change into three or four years," says Kevin Gilbert, a professional photographer who teaches digital photography. "It's no wonder people are feeling a little anxious."

Rightly so—just ask Phil Connor, who developed a sick pit in his stomach when his computer's hardware started wheezing a few weeks ago. The amateur photographer scrambled to make repairs, but he lost almost half his shots from the past three years. "All I know is that I'd never lost a photo that I'd taken with a film camera," the Ontario, Canada, resident says with obvious dismay. It's a reaction familiar to emergency workers, who say that after loved ones or pets, disaster victims usually mourn the loss of their irreplaceable photos the most.

Reality bytes. Few people think about preserving their photos when they buy a digital camera—the immediacy of snapping and sharing is so appealing. Mickie Jobe had two kids home the other day because of inclement weather in North Texas. The grandparents all got shots of 6-year-old Isaac sliding down a neighbor's driveway in a laundry basket. "He was still outside sliding when I was already inside E-mailing the photos," Jobe says.

This rapid proliferation of images may be changing the very role of snapshots. Before digital, some researchers argued that the carefully chosen, often posed photos in albums lied, casting a utopian vision of life as nothing but vacations, parties, and smiles. Sociologist Pierre Bourdieu, who studied French families in the 1950s, came to call the home camera the "festive technology." Anthropologist Richard Chalfen of Tulane University found it played the same role for Americans in the 1980s.

Maybe reality is now creeping in. Some surveys say the typical family shoots

SHOOT

Two pricey new cameras sharpen the case for digital

Canon EOS-1Ds

Traditional photography may still have an edge in permanence, but it is no longer the clear winner in clarity. Two new digital sharpshooters have roughly twice the pixels of the next-closest models—11 million in the Canon EOS-1Ds ($9,000) and 14 million in Kodak's DCS Pro 14n ($5,000).

Instead of the charged-coupled-device (CCD) chips in most digital cameras, these models capture light on cheaper, denser CMOS (complementary metal-oxide semiconductor) chips, a technology widely used in computers. The challenge was getting the same image quality from CMOS, which is prone to "noise."

Canon says its camera will deliver better images than film at any print size. Kodak is more circumspect. A film negative still has more information than either camera can capture, says Kodak's Madhav Mehra, but some gets lost in the printing process. Digital goes straight to print, so Kodak's camera should be better for prints up to 30 inches square, he says. Look for the new technology before long in consumer cameras at more modest prices. *–D.L.*

Kodak DCS Pro 14n

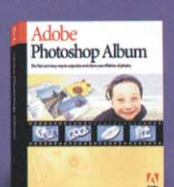
CUSTOMIZE

Software to make digital photos look their best and create real or virtual albums

Digital photos are nothing but computer files. That can be a weakness, but it's also a great advantage. It means you can crop and retouch your photos and organize them into an album—to be displayed onscreen or printed out—all on your PC.

A first software tip: The XP version of Windows is best for working with digital cameras and images. Most cameras come with basic software that does an acceptable job of cropping or removing red eye. Kodak's program, EasyShare, is easier to use than most giveaways and now is free for anyone to download. It is fine-tuned for printing on Kodak paper, but it works well enough with other brands. Another free program, Irfanview *(www.irfanview.com)*, has a surprising array of editing and organizing tools. Mac users luck out with their freebie: IPhoto seems to balance power and simplicity better than any Windows program, free or not.

Picture perfect. For more involved editing, a standout is Adobe Photoshop Elements 2.0 ($100), which lets you retouch an image in layers, making it easy to toy with changes and to blend them gradually for the desired effect. The program's menus can be daunting, though; other, simpler programs with powerful tools include JASC's Paint Shop Pro 7.0 ($100), Ulead's PhotoImpact 8.0 ($90), and Microsoft's Picture It! Digital Image Pro 7.0 ($110). You can test Paint Shop or PhotoImpact at no cost for several weeks.



As unsorted image files build up on your hard drive, other software can help you group and label them or add searchable keywords. Again, a good choice comes from Adobe: Photoshop Album 1.0 ($50). Lifescape Solution's Picasa 1.5 ($30 or free trial) is faster but has fewer features. Others with free trials include JASC's Paint Shop Photo Album ($50) and PhoTags ($30). Unlike other organizing programs, PhoTags applies text to the image itself. The tags, which can be displayed or hidden, are searchable and travel with the image over E-mail. That way, relatives can identify Aunt Rosemary in old family photos that get passed around—although everyone will need PhoTags to view hidden text.

Many of the editing and organizing programs also make it easier to E-mail or print photos, or to have them printed in albums that are neater and better organized than anything in Grandpa's attic. *–D.L.*

FROM LEFT: CANON; KODAK; RIGHT: ADOBE SYSTEMS

Copyright ©2003 by U.S. News & World Report, Inc. (March 24, 2003 Issue)

KEVIN HORAN FOR USN&WR

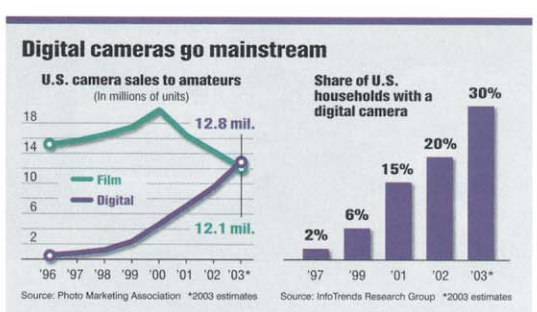
FACING THE FUTURE. Henry Wilhelm (holding a digital photo of himself) tests the life span of papers and inks for inkjet printers.

three times as many frames with digital as it did with film. That means relatively fewer poses and more candid moments (although delete buttons can keep the least flattering moments from ever leaving the camera). Says Chalfen: "We've never seen so much of each other—never been able to hold on to so much visually."

So how can you keep all those memories from evaporating? One safeguard is to back up your hard drive by burning the images onto a CD. Experts suggest using brand-name, write-once CDs, which could last for a decade or a century—but in any case probably longer than the less-hardy rewritable disks. Yet doubts nag even those who routinely store their digital pictures on disk. Geoff Jackson, a computer consultant in Florida, wants his grandchildren 30 years hence to have CDs of his photo collection. But no one knows for sure how the disks will hold up—and whether players in 2033 will be able to read them. "I do worry that CDs will go the way of the big floppy disk," Jackson says.

Even if CDs are still around, today's file formats may not be. Computer and electronics companies aren't known for ensuring backward compatibility. There's no guarantee how long they'll support today's JPEG, the compression format in which most consumer cameras save images. Industry execs say they feel a personal responsibility to keep current formats alive. "We're talking people's memories now," says Jim Malcolm, a manager of Sony's photo products. "I've got five or six years of my kids' life in JPEG files, and a strong vested interest in making sure they can be used decades from now."

Still, the U.S. Library of Congress is spending $100 million on a search for ways to archive, convert, and otherwise safeguard its prized digital data against technologi-



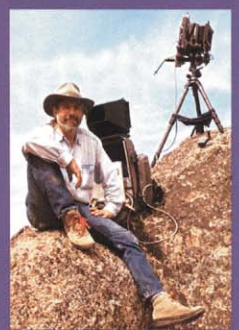
Copyright ©2003 by U.S. News & World Report, Inc. (March 24, 2003 Issue)

ARTIST

For one photographer, a powerful digital camera and its clarity are the key to capturing landscapes as art

Few things offend landscape photographer Stephen Johnson more than a typical national park postcard. The oversaturated colors and hackneyed "classic" views, he complains, do little to capture the essence of wild places. Johnson allows that it's not entirely the photographers' fault. Then what else is to blame? Film. "Color accuracy and color film photography are not synonymous," he notes.

Getting that medium to match reality can mean an endless battle in the darkroom. It's a battle Johnson abandoned in January 1994, when he converted his large-format camera to digital with a special attachment and took his first pictures. Johnson was already a professional photographer and a consultant to digital scanners and publishers in the San Francisco area. Offered a chance to try out the 140-megapixel digital "scanning back," he and its designer, Michael Collette, spent a day taking photographs with both film and the digital attachment. What he saw on



Johnson, his camera, and a view from Mount St. Helens (right)

his computer that night changed his career.

"The amount of actual resolution, the ability to hold highlights and shadows, the extraordinary accuracy of the color—the results were just astounding," he recalls. Johnson abandoned film that day and began immersing himself in the idiosyncrasies of digital scanning-back photography. In the process he became a rarity—an exclusively digital fine-art photographer. With his heavy camera and sweeping landscapes, "his work loops back to turn-of-the-century photography," says David Adamson, a leading digital printmaker, "but he transcends that tradition by . . . making the leap into the digital world."

Color lines. Digital scanning backs, which can cost tens of thousands of dollars, are distant kin to ordinary digital cameras. While consumer models record an image all at once and register red, green, and blue light in alternate pixels, scanning-back devices scan across the image line by line, capturing the colors separately and then merging all three into each pixel. The result: extremely fine resolution and true-to-life color saturation. Collette's prototype required nearly four minutes to make a single image. The current version of the digital camera back, the BetterLight, takes just over a minute.

While this rules out using the device for action shots, the line-by-line scanning can produce captivating effects, particularly when there's water in the scene. The slicing of time lifts waves into brushstroke-like pinnacles flecked by minuscule rainbows. Wind-whipped mist whisked off a waterfall paints ghostly fingers across the surrounding rocks. And because of the enormous size of the image files, even taking a magnifying glass to one of Johnson's 40-by-60-inch prints won't reveal an iota of graininess.

Nine years after he first saw what digital scanning backs could do, Johnson is putting the finishing touches on "With a New Eye," a digital survey of more than 50 of America's national parks (you can see glimpses at *www.sjphoto.com*). He hopes that his work, combined with increasingly powerful consumer digital cameras, will convince others that digital is the future of art photography as well as of snapshots. "Digital photography has the promise of being dramatically better than film-based photography," he says. "On the high end where I'm working, it already is." *–Janet Rae-Dupree*

FROM LEFT: DAVID GARDNER—© 2003 STEPHEN JOHNSON PHOTOGRAPHY; © 1995 STEPHEN JOHNSON

cal glitches and obsolescence. For mere consumers, there's one sure answer, and it's a familiar one, says Mark Roosa, the library's preservation director. Make a durable print, and protect it as you would any prized photograph.

With film, that advice is easy to follow—just have your photos preserved on good-quality paper. With digital, it takes some expertise, especially if you print at home. It was around 1994 that affordable home printers were first able to spit out small enough ink drops for realistic photos. Problem was, their inks and papers were meant for corporate graphs or children's book reports. These days, prints from just about any late-model printer can look as good as a traditional photo. But their durability is less certain. Inkjet prints "were never designed for display, much less for the years that we display our photos," says Henry Wilhelm, a folksy Iowa researcher who has spearheaded interest in "image permanence." Wilhelm accelerates the slow ravages of time to test photo durability. With racks of intense lamps and hot ovens, he concocts a harsh version of a photo's life pinned to a refrigerator door or stored in an attic.

Paper trail. A onetime photo chronicler of civil rights and Vietnam War demonstrations, Wilhelm first gained notoriety, at least among professional photographers, for taking on giant Kodak over what he said were shoddy papers used in 1960s and 1970s color prints. Any family with photos from that era has sad examples of the fading problem. Kodak responded with improved papers and chemicals, and the issue itself faded away. Kodak also helped fund an alternative to Wilhelm's outfit, the Image Permanence Institute in Rochester, N.Y., another independent lab.

Inkjet print quality has become a new target for Wilhelm and the permanence institute. Traditional prints last well partly because their fragile color dyes are imbedded in gelatin layers that are plastered to good-quality paper, which protects the dyes from sunlight and air. Also, the prints are processed with chemicals that are matched to the paper type. With inkjets, in contrast, the pigments are often exposed, and consumers get to choose their own inks and paper, sometimes mixing varieties not designed to work together.

Prints from early machines faded in months, and the longevity scientists took aim. Their results prodded the manufacturers into action. Wilhelm says Hewlett-Packard and Epson have notably improved how long their prints can last. His tests show that their printers can generate images that actually outlast a traditional print. Unfortunately, he also found that such impressive results require papers and inks recommended by the printer maker rather than cheaper knockoffs. Third-party supplies often are designed to work with any printer, forcing compromises. Makers of third-party papers also struggle to keep pace with changing ink formulas. "It's tough enough for HP to keep up, and we have armies of chemists," says Nils Miller, a chemist who helps design supplies for the company.

For archival prints, consider getting one of the newer six-ink printers, which are best at reproducing subtle tones, and print at the highest resolution. Then display the results under glass or store them in acid-free albums at moderate temperatures—"where you sleep," says one conservator, and certainly not in a hot attic or moist basement. Other tips can be found at Wilhelm's site, *www.wilhelm-research.com*, where he promises to display longevity data on dozens of printer/ink/paper combinations in the coming months.

Alas, even the best advice is no guarantee of a lasting print, because both inkjet technology and the science of accelerated tests are young. "We can't be sure there won't be a surprising new mechanism of failure," says James Reilly, director of the Image Permanence Institute. Wilhelm, for example, was blindsided after Epson, backed by his tests, first touted new, "archival" inkjet systems in 2000. Within weeks, buyers complained of an unsightly orange tone emerging in prints. The culprit turned out to be atmospheric ozone, a problem in some places like Los Angeles, which attacked prints left exposed to the air. "It caught the entire industry off guard," Wilhelm says. Epson adjusted paper formulas to lessen the problem but still recommends that any prints made with dye-based inks, typical for consumer printers, be displayed under glass.

The safest option by far is the oldest, say Reilly and others: Entrust your favorite digital photos to standard silver-

Copyright ©2003 by U.S. News & World Report, Inc. (March 24, 2003 Issue)

PRINT

Matching paper and printer for images that resist fading

Some inkjet printers can now produce images that last longer than traditional photo prints. The table indicates how long prints can resist noticeable fading when exposed to indoor lighting and framed under glass. Glass keeps out ozone, which is particularly important for papers with tiny pores designed to absorb ink quickly, often sold as "instant drying." Most of the listed printers are six-color models, and Epson's 2200 is a pigment ink printer, a pricey alternative that yields more durable prints than dye inks can.

PRINTER	PAPER	DISPLAY YEARS
EPSON 2200	Epson Watercolor Paper	90
	Hammermill Jet Print	about 30
HP 2110, 2210, 5550, 7150, 7350, 7550	HP Premium Plus Glossy	73
	Kodak Ultima-Glossy	17
Canon S900, i950, S9000	Canon Pro PR-101	38
	CompUSA Super High Gloss	9
Epson 820, 825, 925, 960, 1280	Epson ColorLife SemiGloss	27
	CompUSA High Gloss	5
Lexmark Z55, Z65 (4-color inks)	Ilford Printasia Glossy	6
	Staples Premium Glossy	1
Traditional photo processing	Fujicolor Crystal Archive	60
	Kodak Ektacolor Edge 8	22

Source: Wilhelm Imaging Research Inc.

This inkjet print faded in two years, but high-quality prints can last longer.

SEIKO EPSON CORP

halide printing. So far, that hasn't been so easy. The labs that produce traditional silver-based prints were set up only to handle film, and techs often look blankly at the memory cards that hold digital photos. But that is starting to change.

Earlier this month, a photo industry show in Las Vegas was packed with equipment designed to draw digital camera users into photo labs to make traditional prints. Store owners were inspecting the displays closely. "Digital is scary," says Dan Novis, owner of Gaslamp Photo in San Diego. Digital is cutting into processing volumes, and rebuilding them requires new minilabs—those big contraptions behind drugstore counters that process film; digital versions start at around $100,000, several times the cost of a conventional setup.

Novis has bought two digital minilabs, but nationwide, fewer than 20 percent of shops are ready for electronic images. Still, the single largest film processor, Wal-Mart, is rushing digital minilabs to its stores. Prices for printing from computer files tend to be competitive with film—in the range of 25 to 50 cents for a 4-by-6-inch print. And unlike film processing, digital printing services let a user choose which frames to print and edit out flaws like red eye. Often the digital-ready photo labs have a front-end kiosk that lets consumers download their photos and do basic editing themselves.

If the Las Vegas floor was any indication, those kiosks could soon be popping up on cruise ships and at amusement parks and malls—just about anywhere an ATM might go. One outfit, in fact, calls its version the APM, for automated photo machine. Some would spit out photos on the spot; others would send the files over the Internet to a central lab, for prints that would be mailed later.

That kind of online service is already available from your home computer. Sites including *www.shutterfly.com*, *www.snapfish.com*, and *www.ofoto.com* make it easy to upload images and order prints, which are delivered to your door—but the process typically takes a week or so.

Photos by wire. Worried that the market for their paper and chemicals is drying up, photo companies are offering still other options. Nobody has more at stake than Kodak, where company execs concede that digital could cut sales by 5 percent this year. The firm is pushing a system that would let consumers send images over the Internet—from a kiosk or a home computer—to be printed at a photo shop anywhere in the country. A family visiting, say, Disney World could upload photos to be output at a store near their Tennessee house, or at the drugstore near Grandma's in Arizona. Fuji is setting up its own Internet system.

So far, only a tiny fraction of digital camera users—4 percent or so—have tapped stores or the Internet for prints. But getting consumers back to the labs may prove easier as digital cameras go more mainstream and women get more involved in what's been a gadget-driven, male-dominated activity. "A busy mom doesn't have time to edit and print at home," says Michelle Slaughter, a market analyst with InfoTrends. "They just want a decent print and aren't of the mindset to do it themselves."

That applies to Alisha Pitchford. Although she has gone completely digital in photographing her Tucson family, she still wants prints to paste in scrapbooks, and she is relying on photo labs to make them. Her last order was for 500 prints at the local Sam's Club, a warehouse store owned by Wal-Mart. "That's a lot, I know, but if I don't get them printed now, I may never get it done.

"And I'd hate to lose any of them." ●

Copyright ©2003 by U.S. News & World Report, Inc. (March 24, 2003 Issue)

PRINT Matching paper and printer for images that resist fading

Some inkjet printers can now produce images that last longer than traditional photo prints. The table indicates how long prints can resist noticeable fading when exposed to indoor lighting and framed under glass. Glass keeps out ozone, which is particularly important for papers with tiny pores designed to absorb ink quickly, often sold as "instant drying." Most of the listed printers are six-color models, and Epson's 2200 is a pigment ink printer, a pricey alternative that yields more durable prints than dye inks can.

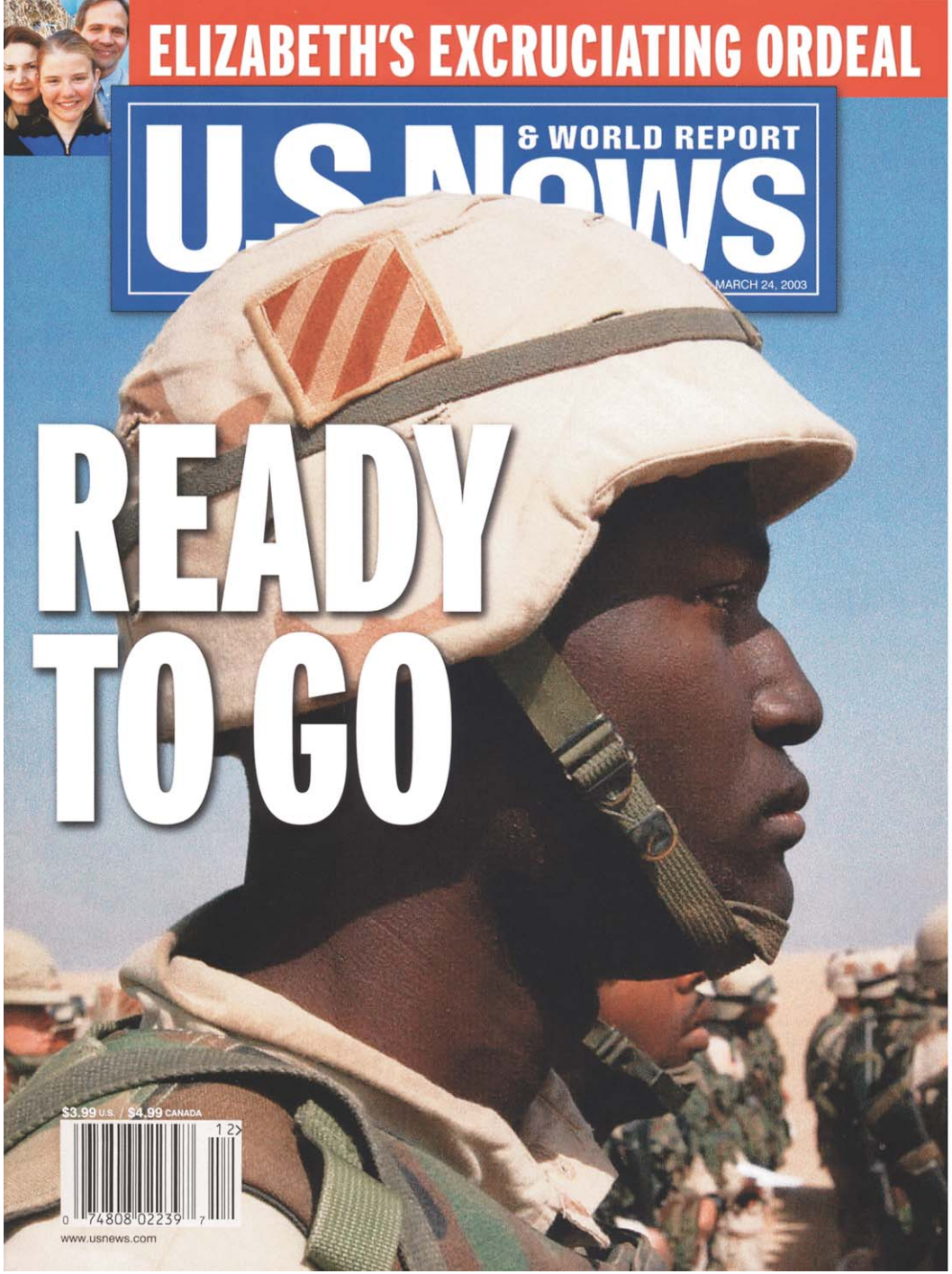
PRINTER	PAPER	DISPLAY YEARS
EPSON 2200	Epson Watercolor Paper	90
	Hammermill Jet Print	about 30
HP 2110, 2210, 5550, 7150, 7350, 7550	HP Premium Plus Glossy	73
	Kodak Ultima-Glossy	17
Canon S900, i950, S9000	Canon Pro PR-101	38
	CompUSA Super High Gloss	9
Epson 820, 825, 925, 960, 1280	Epson ColorLife SemiGloss	27
	CompUSA High Gloss	5
Lexmark Z55, Z65 (4-color inks)	Ilford Printasia Glossy	6
	Staples Premium Glossy	1
Traditional photo processing	Fujicolor Crystal Archive	60
	Kodak Ektacolor Edge 8	22

Source: Wilhelm Imaging Research Inc.

This inkjet print faded in two years, but high-quality prints can last longer.

SEIKO EPSON CORP

Copyright ©2003 by U.S. News & World Report, Inc. (March 24, 2003 Issue)



U.S.News & WORLD REPORT
NEWS YOU CAN USE

MARCH 24, 2003 • VOLUME 134 • NUMBER 9 • WWW.USNEWS.COM

COVER STORY

The prelude to war is hell

The troops within sight of Iraqi soil face boredom, punishing sandstorms, and the uncertainty about what Saddam has planned for them. By Mark Mazzetti

PAGE 23

CLOCKWISE FROM TOP: JUSTIN SULLIVAN—GETTY IMAGES; CANON; JEFFREY MACMILLAN FOR *USN&WR*

NATION & WORLD

18 **The march to war**
Diplomatic efforts at the United Nations appear chaotic and clumsy, and Bush is losing patience

23 **Cover story: Battle ready**
The troops are set and all the pieces are in place for a military invasion of Iraq, but will a war really go as planned?

33 **Northern Iraq's other war**
Secular Kurds fight their own battle against the militant Ansar al-Islam

34 **The bomb builders**
Photo essay: Business is booming at America's main ammunition plant

MONEY & BUSINESS

38 **Budget bog**
Will Bush's plans lift the economy and put people back to work—or cause irreparable damage?

42 **A shift toward thrift**
Americans are saving more, but is it at the economy's expense?

44 **Letter from North Dakota**
Altered waves of grain: Genetically modified wheat poses a dilemma for both farmers and legislators

CULTURE & IDEAS

48 **Hosannas in Utah**
For now it's all joy for Elizabeth Smart's family. The sordid details will come later

50 **Bitter debate over late-term abortions**
Many doctors are incensed by congressional efforts to ban the procedure

52 **Soldiers' stories**
Cynical and conflicted, a marine's memoir reflects the changing literature of war

HEALTH & MEDICINE

54 **Fit for the road**
These days, you have a better chance than ever of finding a decent hotel gym

61 **Airplane yoga**
And other workouts for travelers

63 **Mr. Outside moves inside**
Lawyer Daniel Troy fought the FDA for years. Now he's helping to run it

SCIENCE & TECHNOLOGY

66 **Are photos finished?**
Going digital makes memories easier to snatch and share—but harder to hold on to, as most prints begin to fade quickly

DEPARTMENTS & COLUMNS

4 **Washington Whispers**
8 **People**
10 **Letters**
13 **John Leo**
On Society
14 **Top of the Week**
36 **Gloria Borger**
On Politics
62 **Bernadine Healy, M.D.**
On Health
76 **Mortimer B. Zuckerman**
Editorial

Copyright © 2003, by U.S.News & World Report Inc. All rights reserved. *U.S.News & World Report* (ISSN 0041-5537) is published weekly with combined issues on January 27, February 24, June 30, July 28, August 18, and December 29 by U.S.News & World Report Inc., 450 W. 33rd Street, 11th Floor, New York, NY 10001. Periodicals postage paid at New York, NY, and at additional mailing offices.

POSTMASTERS: Send address changes to U.S.News & World Report, PO Box 421197, Palm Coast, FL 32142-1197. *U.S. News* may allow others to use its mailing list. If you do not want your name included, please contact our Subscription Department by mail or phone.

U.S.NEWS & WORLD REPORT® U.S. NEWS® WORLD REPORT® NEWS YOU CAN USE® WASHINGTON WHISPERS® Canadian Post International Publications Mail (Canadian Distribution) Sales Agreement No. 40051845. Canadian Goods and Service Tax No. R124481334 U.S.News & World Report uses automatable polywrap.

Printed in the U.S.A.

EDITORIAL OFFICES (202) 955-2000. 1050 Thomas Jefferson Street NW, Washington, DC 20007-3837
ADVERTISING AND CORPORATE OFFICES (212) 716-6800. 450 W. 33rd Street, 11th Floor, New York, NY 10001
SUBSCRIPTION DEPARTMENT (386) 447-6326. PO Box 421197, Palm Coast, FL 32142-1197 usnews@palmcoastd.com
CLASSROOM PROGRAM (215) 321-1121. 33 S. Delaware Avenue, Suite 202, Yardley, PA 19067 www.usnewsclassroom.com

COVER: PHOTOGRAPH BY CHRISTOPHER ANDERSON—VII FOR *USN&WR;* A U.S. SOLDIER FROM THE 3RD INFANTRY DIVISION IN NORTHERN KUWAIT, MARCH 12, 2003; (INSET) TOM SMART—*DESERET NEWS* / GETTY IMAGES

Copyright ©2003 by U.S. News & World Report, Inc. (March 24, 2003 Issue)