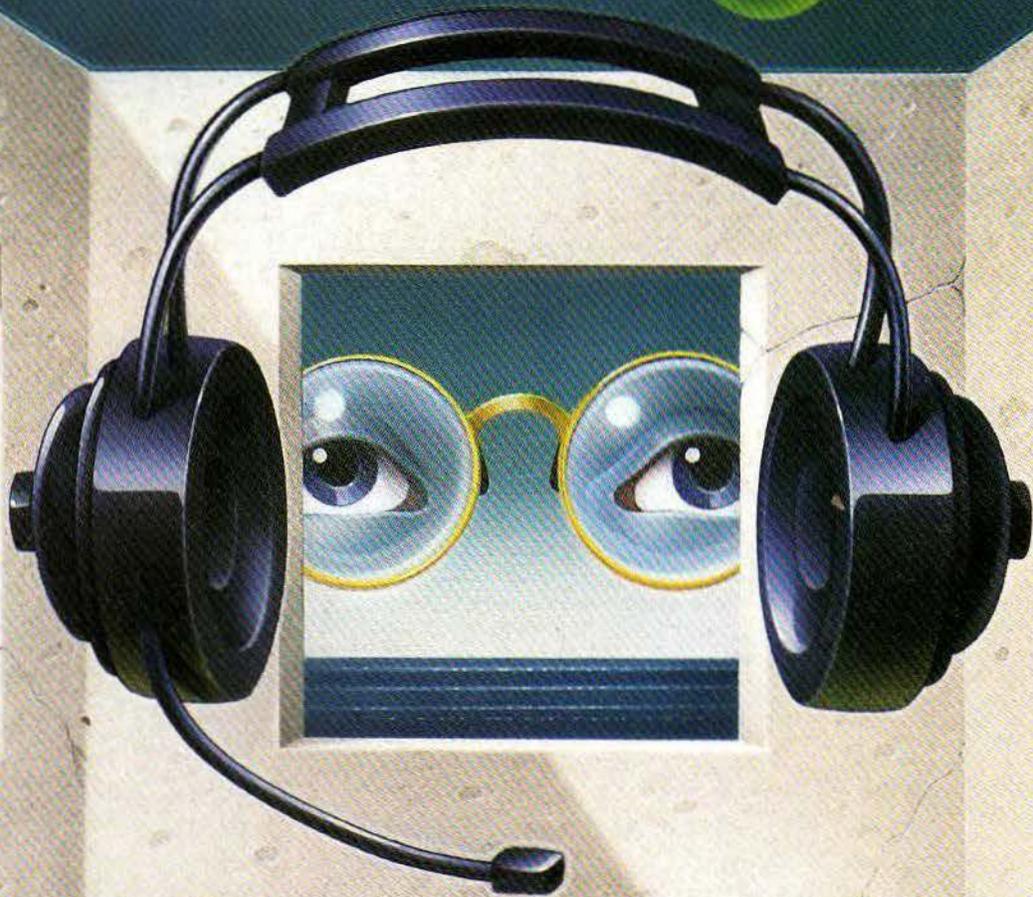


DICK CHENEY: THE FUTURE OF MILITARY POWER

ONLINE

MARCH 1991

BACH TO THE FUTURE: COMPUTER MUSIC GROWS UP
ROBOTS: THE NEXT STAGE IN EVOLUTION?
WHY SUCCESSFUL PEOPLE FAIL



\$3.50



RUDNAK

BOB GUCCIONE
editor in chief & publisher

KATHY KEETON
president

OMNI PUBLICATIONS INTERNATIONAL LTD.

THE CORPORATION

Bob Guccione (*chairman of the board*)
 Kathy Keeton (*vice chairman*)
 David J. Myerson (*president*)
 Anthony J. Guccione (*secretary-treasurer*)
 William F. Mariah (*president, marketing, sales, and circulation*)
 John Evans (*senior v.p., foreign editions*)

EDITORIAL

Editor in Chief: Bob Guccione; *Editor:* Keith Ferrell; *Managing Editor:* Phil Scott; *Executive Editor:* Kevin McKinney; *Int'l. Editor:* W.E. Gutman; *Editor at Large:* Pamela Whiteaub; *Sr. Editor:* Murray Cox; *Fiction Editor:* Ellen Datow; *Humor Editor:* Bill Lee; *Staff Writer:* Kathleen Stone; *Assoc. Editors:* Sundry Fritz, Erin Murphy; *Copy Chief:* Bon Spier; *Research Editor:* Beth Howard; *Assistant Editor:* Mary S. Glucksmann; *Ed. Assistants:* Kelley A. Monahan, Robert K. J. Killbeller, Teresa Allee, Scott Fierman; *Games Editor:* Scott Morris; *Contributing Editors:* Jane Rosvold, Tom Dworetzky, Ellen Kunes, Bill Lawton, Shari Rudavsky, Cathy Spencer; *Offices:* 1965 Broadway, New York, NY 10023-5965, Tel. (212) 496-6100, Telex: 237128, Fax: (212) 580-3693.

ART

Senior VP/Graphics Director: Frank DeVino; *Art Director:* Dwayne Finchum; *Asst. Art Director:* Cathryn Borgiorno; *Designers:* Elizabeth Gething, Erika Kightlinger; *Art and Photo Editor:* Hildegard Kron; *Assoc. Photo Editor:* Alison Rigney; *Asst. Mgr., Art Rights:* Mana Rothenberg; *Special Asst. to Bob Guccione:* Jane Honish

ADVERTISING AND MARKETING

VP/Assoc. Publisher: Linda Newman; *VP/Adv. Dir.:* James B. Martise; *Natl. Adv. Mgr.:* Kevin Smith; *VP/Sales Development:* Edward J. Treobald, Jr.; *Sr. VP, Overseas Sales:* Beverly Wartale; *VP/Dir. Group Acq.:* Nancy Keelenbaum; *Sr. VP/Midwest and Southern Adv. Dir.:* Peter Goldsmith; *Midwest Adv. Mgr.:* Dave Dolton; *Assoc. Adv. Mgr.:* Southern Region: Harriet Rogers; *Natl. Direct. Response Mgr.:* Yvonne Marie; *Adv. Prod. Dir.:* Charlene Smith; *Adv. Prod. Traffic Mgr.:* Mark Williams; *Offices:* New York, 1965 Broadway, New York, NY 10023-5965, Tel. (212) 496-6100, Telex No. 237128, Fax: (212) 580-3693; *Midwest:* 333 N. Michigan Ave., Chicago, IL 60601, Tel. (312) 346-9393, Fax: (312) 346-3518; *Detroit:* Albairn Associates Inc., 418 W. 5th Street, Suite C, Royal Oak, MI 48067, Tel. (313) 546-2227, Fax: (313) 546-0019; *Dallas:* Carol Orr & Company, 3300 Oak Lawn, Suite 414, Dallas, TX 75219, Tel. (214) 521-6116, Fax: (214) 621-6176; *South:* 1725 K St., N.W., Suite 903, Washington, DC 20006, Tel. (202) 728-0320, Fax: (202) 728-0389; *Los Angeles:* 6728 Eton Ave., Canoga Park, CA 91305, Tel. (818) 992-4777, Fax: (818) 992-4979; *San Francisco:* 353 Sacramento St., Suite 400, San Francisco, CA 94111, Tel. (415) 391-7709, Fax: (415) 433-5994; *Florida:* J.M. Remer Assoc., 3300 N.E. 192 St., Suite 192, Aventura, FL 33180; *U.K. & Europe:* Birthouse Clubs Ltd., 11 Whitehorse St., London W1, England, Tel. (011) 441-379-5342, Fax: 851-246-76; *Japan:* Intergroup Communications, Ltd., Pres. Jiro Seimba, 3F Tiger Bldg., 5-22 Shiba-koen, 3-Chome, Minato-ku, Tokyo 105, Tel. 03-434-2607, Telex J25469 IGLIYO, Fax 434-5970; *Korea:* Kaya Advertising, Inc., Pres. S.H. Hwang, Room 402 Kunsin Arnez B/D 251-1, Dohwa Dong, Mapo-ku, Seoul 121, Tel. 719-6906, 6907, 9813, Telex K 32144 Kayaad; Cable: 'Kayaad' Seoul, Fax 822-7199316.

ADMINISTRATION

C.O.O.: David J. Myerson; *Senior VP/Administrative Services:* Jet Winston; *Senior VP/Production Director:* John Evans; *VP/Controller:* Patrick Gavin; *VP/Newsstand Circulation:* Marcia Orvitz; *VP/Director New Magazine Development:* Poni Cherry; *Dir. Newsstand Circulation:* Paul Polnick; *Dir. Newsstand Dist.:* Charles Anderson, Jr.; *Dir. Newsstand Marketing & Int'l. Sales:* Bruce Eldridge; *Dir. Sub. Circ.:* Marcia Schultz; *Public Relations Mgr.:* Diane Hall; *Publicity Coordinator:* Steve Serpas; *Dir. Research:* Fobert Ratner; *VP/Dir. Sales Promotions:* Beverly Grepper; *Publicist:* Catherine Jarrat Koatz; *VP/Prod. Dir.:* Hal Halpern; *Prod. Mgr.:* Tom Stinson; *Asst. Prod. Mgr.:* Nancy Rice; *Foreign Editions Mgr.:* Michael Stevens; *EPs Mgr.:* Lisa Sulgiti; *Type Systems Assoc.:* Mitch Mondello; *Traffic Mgr.:* William Harbutt

MARCH

COMMUNICATIONS

READERS' WRITES:

Of celestial reasoning, sacred groves,
 and queens of the Nile

Look Up in the Sky! It's a...

On behalf of like-minded readers I congratulate your December 1990 issue. You are the first credible general-interest magazine to present the issue of UFOs without condescension. In the late Seventies I interviewed Allen Hynek, the first scientist to publicly take UFOs seriously. As a result, he faced the ridicule of the scientific community for the rest of his life—a heavy price indeed. In 1600 Giordano Bruno, a Dominican monk, was burned at the stake for suggesting that life may exist elsewhere in the universe. In 1978 Hynek was merely dismissed as a fool. Now, at last, as we approach the twenty-first century we reluctantly realize that we may not be alone in this vast universe. What blockheads we are.

Larry Pont
 Ogden Dunes, IN

Let me get this straight. A highly intelligent race of beings sends an unimaginably advanced spacecraft across light-years of space. Through pilot error or catastrophic equipment failure, the darn thing crashes. You listed five convincing cases of crashed landings ("Alien Almanac"). You'd think that after the first one, the extraterrestrials would issue a memo: "Watch out for Earth; it's a tricky one." Or do we live on the galactic triangle?

Eric Bickernicks
 Norwood, MA

Writer Patrick Huyghe explains part of the government cover-up of UFO reports by revealing how our government cracks foreign codes. But he seems reluctant to report on secret aircraft testing that we can assume resulted in crashes. The willingness of any government to credit such occurrences to UFOs is quite normal. Their covering up may be military secrets, not UFOs.

Frank G. Pollard
 Farmington Hills, MI

Thomas R. McDonough [Stars, December 1990] should have been more thorough in his analysis as to why E.T. has not yet phoned Earth. He offers two very plausible hypotheses, but his notion of

"induced permanent ecstasy" is a bit out of this world. I'm not a skeptic. The odds against our tiny planet being alone in this immense galaxy are astronomical. McDonough should have taken more time in the conceptualization of his ideas and perhaps he would have thought of a few more that are more believable. For those aliens living in their sheltered ecstasies, stay home and don't call us. We'll call you.

Jeffrey A. Rhind
 Situate, MA

From the Redwood Forest...

In the article about Northern California's coastal redwoods [Continuum, December 1990] you printed a picture of a sequoia—and the caption even calls it a sequoia. Although coastal redwoods are technically *Sequoia sempervirens*, they are commonly called redwoods or coastal redwoods. We have an identity crisis already because many people think our trees are the same as the redwoods. All the residents of Sequoia National Park would be grateful if you could clear up the misunderstanding.

Theresa Walters
 Sequoia National Park, CA

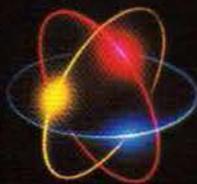
Relying on clones to repopulate Northern California's diminishing redwood forests is suicide. All it takes is a single virus or bug to defeat one clone, and it will defeat all clones! With the environmental mistakes we've already made, it's stupid to add another bullet to this game of Russian roulette.

Scott Tokar
 Tustin, CA

Here's to You, Mrs. Ramses

An incorrect statement was credited to Farouk el-Baz [Interview, December 1990]. Ramses II was not married to Nefertiti. Although they were both from the New Kingdom Period, Ramses ruled in the nineteenth dynasty; Nefertiti was the wife of Amenophis IV (Akhenaton) in the eighteenth dynasty. The first wife of Ramses II was Nefertari, for whom he built the minor temple next to his great temple at Abu Simbel.

Sylvia McDonald Bowman
 Henderson, NV



ANTIMATTER

UFO UPDATE:

Are new UFO photos evidence of E.T.'s or the work of a keyboard con artist?

Fake photographs have always given UFO researchers fits. In the past, of course, analysts could usually cull the wheat from the chaff. But those days may soon be coming to a close.

An ultrasophisticated digital image processing machine, the experts say, can now gobble up reality and spit out alarmingly authentic, possibly undetectable illusions.

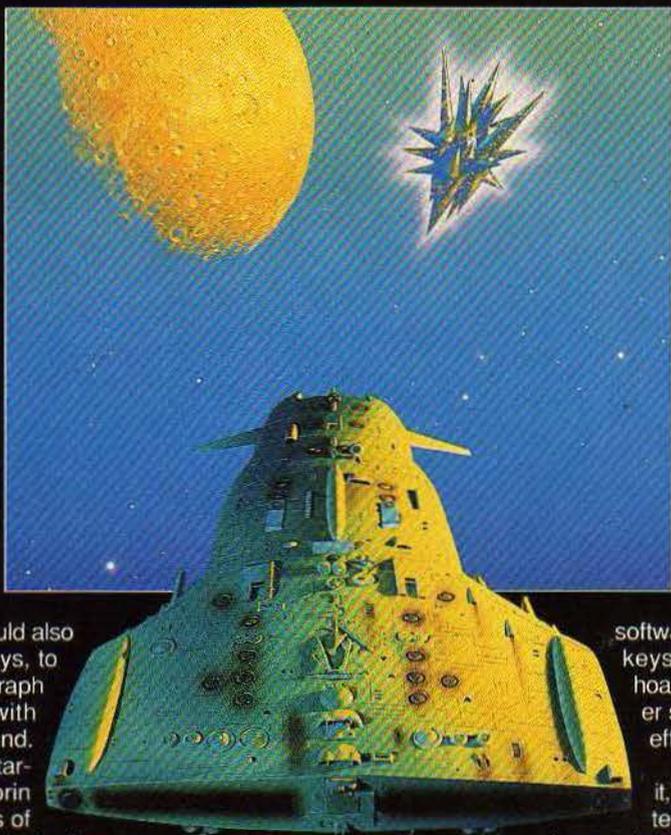
It's really a question of the computer operator's skill, says Brad Dorin, president of Printbox, Inc., in New York. Dorin usually uses his \$2 million worth of electronic gizmos to generate ad images for Madison Avenue. But he could also use his machines, Dorin says, to manufacture a UFO photograph that would pass muster with even the best analysts around.

Although he works with star-wars-quality equipment, Dorin thinks that close encounters of the photographic kind could also be counterfeited on a home computer. While the quality of the outcome depends on the ability of the hoaxer, he says the forgery would simply take longer on a low-end system and "you'd have to know more about what you were doing."

So let's say that you have chosen your ideal UFO model, suspended it from a string, snapped a picture, and now want to get out the kinks. To begin with, Dorin suggests sticking to a black-and-white image. "There's just less there," he says, "so it's easier to do a better job."

You also need an input device such as a video scanner or video camera to transfer the photo to your computer. The scanner digitizes the original photo, turning each line into electronic numbers, and these are copied onto the computer's hard disc. From there the image is summoned up on the screen just as you would any ordinary graphics file.

Then, using paint software, the digitized image could



be moved, shaded, removed, or enhanced, and alternative artwork may be inserted in the scene. You could, for instance, remove the string from your dangling spacecraft and shade in some sky as well. You could also paint in the appropriate cloud cover and shadow for any given hour of the day or night.

According to Steve Guttman, product marketing manager at Adobe Systems in Mountain View, California, the computer itself can range from a PC-DOS desktop machine to a Macintosh on up to a mainframe. With Adobe's PhotoShop software, for instance, only a few keystrokes stand between the hoaxer and his ersatz reality. Other software paint packages are effective as well.

"You work on it until you like it," Dorin says. Adds Adobe Systems' Guttman, "The more you understand about how shadows are cast, the better the outcome will be."

Physicist Bruce Maccabee, chairman of The Fund for UFO Research and an expert in photo analysis, agrees that the gee-whiz technology is sophisticated. But he doesn't think that he's been duped by it yet.

How can he be so certain? Maccabee says he knows what to look for in such photographs, although he refuses to give examples and thereby reveal his game plan to a potential hoaxer.

What's more, Maccabee says, tough cases turn on interrogation of the photographer, not the photo. "Once the photo has passed some basic tests, the photographer has to tell a convincing story about the UFO experience. It must be logical and consistent, but not memorized." So while Maccabee agrees that it's easier to fudge a photo today, he still thinks it would be difficult to fool the experts with a hoax.—PAUL McCARTHY