SELECTIVE UPDATE

**Raster Tech graphics contest gets encore**

Raster Technologies and The Computer Museum of Boston are once again challenging individuals "to design the most outstanding and imaginative computer graphics image in the industry." Entries for the second annual International Computer Graphics Image Contest are due June 1 and the winners will be announced at SIGGRAPH 86 in Dallas August 18-22.

Last year's contest attracted more than 300 entries, and the grand prize went to Don Stredney and Jose Garabis of Cranston/Csuri Productions.

Entries must be submitted in 35-mm slide format and will be judged for creativity, use of color, visual impact, and unique usage of computer graphics. The panel of judges is made up of distinguished members of the computer graphics and graphic arts industries.

This year's panel includes Terry Blum, a fine artist and coordinator of the computer graphics laboratory at the Fashion Institute of Technology; Robert P. Holton, publisher of Computer Graphics World; Richard Phillips, a professor in the departments of aerospace engineer-

ing and computer science at the University of Michigan and a member of the editorial board of CG&;A; Oliver Strimpel, associate director and curator of The Computer Museum; and Andries van Dam, professor of computer science at Brown University.

Entries may be produced with any computer graphics system, not just those made by Raster Tech—an unusual feature among corporate-sponsored contests.

"We clearly believe that computer-generated graphics is rapidly gaining importance in a number of market areas," said Louis Doctor, a spokes-

man for Raster Tech. "We felt that our sponsorship of the image contest would contribute to the exploration of potential new applications which will enhance our daily lives."

First, second, and third place prizes ($1000, $500, and $200, respectively) will be awarded in both professional and student categories, with a $2000 grand prize going to the most outstanding entry in either category. Finalists' entries will be displayed at SIGGRAPH 86 and winning entries will be exhibited at The Computer Museum in Boston.

Employees of Raster Tech, its public relations and advertising agencies, The Computer Museum, family members of the above, and contest judges or employees of their firms are not eligible.

For further information, complete contest rules, and entry forms, contact Computer Graphics Image Contest, Raster Technologies, Two Robbins Rd., Westford, MA 01886; (617) 692-7900.

A pioneer in the interactive computer graphics market, Raster Tech has expanded rapidly during the last four years and celebrated the New Year by moving from North Billerica, Massachusetts to a new, larger facility in Westford.

The Computer Museum was founded in 1979 by Digital Equipment Corp. It received not-

profit status as an independent museum in 1982 and opened its doors at 300 Congress Street, Boston, on November 14, 1984. The museum's stated purpose is to pre-

serve, collect, and exhibit artifacts related to the history of information processing.

**ANA Tech moves into Japanese market**

Mitsubishi is now marketing ANA Tech's automated drawing conversion system in Japan under an exclusive distributorship agreement. Mitsubishi said the Denver-based firm's product was chosen after "an extensive search throughout the US" for systems that convert hard copy drawings into CAD-compatible digital data.

"We selected ANA Tech's tech-

ology because it is the most advanced technology available, and it provides the best price-to-performance ratio in the market," said Mitsubishi.

The ANA Tech system consists of an E-Size scanner that scans at 500 and 1000 lines per inch; VANA, a hardware vectorizer that converts raster data to vector format in real time, and then translates the vector file into an intelligent database for transmission to a CAD system; and proprietary software.

Technodia, a Mitsubishi subsidiary, now has a demonstration system that is being used to show the products to users. Mitsubishi expects the system to do particularly well in the mapping markets and has made an initial sale to PASCO, a Japanese aerial survey firm. PASCO will be using the system for inputting data into its geographic information system.
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New art contest established

The Truevision Art Contest has been established to encourage innovative and creative uses of Truevision and Island Graphics products. The contest is being sponsored by AT&T's Electronic Photography and Imaging Center (EPICenter) and Island Graphics.

The sponsors have guaranteed $20,000 in prize money in an effort to foster computer art and support computer artists. The winners will be announced at SIGGRAPH 86 in Dallas August 18-22.

Entries will be judged for composition, originality, and creative use of Truevision products. The panel of judges includes Margaret Neal, managing editor of IEEE CG&A; Tom McMillan, managing editor of Computer Graphics World; and several industry experts.

Entries must include a completed entry form for each image and three duplicate floppy disks per image. They must be postmarked no later than June 15, 1986. All floppies become the property of the contest sponsors unless a self-addressed, stamped floppy mailer is included.

First, second, and third place prizes and two honorable mentions ($3000, $1000, $500, and $250 each, respectively) will be awarded in four categories. Each category specifies the hardware, software, and creation technique to be used.

Category One requires the use of an Image Capture Board (ICB) and Truevision Image Processing Software (TIPS) for ICB. Images must be hand rendered, containing no photo-digitized information. Category Two requires the use of the same hardware and software as the first category, but the images must be created using photo digitization with hand modifications.

Category Three requires the use of a Truevision Advanced Raster Graphics Adapter (models 16, 24, and 32) and TARGA TIPS software. The image must be hand rendered, with no photo digitization. Category Four requires the same hardware and software as the third category, but the images must be created by using photo digitization with hand modifications.

Employees of EPIcenter and Island Graphics are not eligible to enter the contest. For product information, contest rules, and entry forms, call AT&T Truevision at (800) 854-TRUE.
CAD goes for the checkered flag

Lola Cars of Cambridgeshire, England, world's largest producer of race cars, is now drawing, revising, and testing new aerodynamic racing designs with a CAD system provided by Prime Computer. Lola was the top racing car in the 1985 U.S. CART racing series with drivers that included Al Unser, Jr., and Mario Andretti.

The key software component of the system is Ford Motor Company's Product Design Graphics System (PDGS), a three-dimensional modeling system for the design and numerically controlled machining of curved body surfaces. PDGS is marketed exclusively by Prime.

Lola founder Eric Broadley called CAD technology "a tremendous aid to better and faster design. And in this business, that's critical." Race car designers don't enjoy the long production cycle of the passenger car industry, contending instead with a concept-to-production cycle that is only four to six months.

"We anticipate that the computer system will allow us to move through the design process more quickly and let us consider far more data and configurations than we normally would," said Broadley.

Eventually we plan to take the PDGS output and transmit it directly to our pattern-making machinery for the manufacturing of body shapes and suspension parts."

The Prime equipment was installed at Lola's design facility in Cambridgeshire last October. In addition to the PDGS software, it includes a Prime 2550 computer; SAMMIE, 3D CAD modeling software that can test the comfort, viewing parameters, and movements of a person within a racing car cockpit; and additional networking and database management programs.

The Prime/Lola connection is the result of a five-year agreement between Prime and Carl Haas, a Chicago businessman and the US distributor of Lola cars. Haas is also co-owner of Newman-Haas Racing for the US CART series and owner of Team Haas USA for the Formula One racing series.

Adage to acquire Lexidata

Adage and Lexidata have signed a definitive merger agreement that provides for the acquisition of Lexidata by Adage. Initial plans call for Lexidata to operate as a division of Adage.

Adage is a leading manufacturer of graphics terminals that are plug-compatible with IBM hardware, and also supplies high-performance graphics products to other end-user markets. Lexidata, on the other hand, manufactures graphics products targeted primarily at the OEM marketplace.

Because of this complementary relationship, the merger is "a natural union of two graphics companies," said Kurt Dossin of Lexidata.

According to Adage President and CEO Richard N. Spann, the merger addresses two of Adage's corporate imperatives: reducing dependence on the IBM plug-compatible market and pursuing external opportunities that will further long-term growth.

The proposed transaction has to be approved first by the Securities and Exchange Commission and then by the shareholders of each company. A Lexidata spokesman said the special shareholders' meetings are expected to be held in late February.

Both Adage and Lexidata are located in Billerica, Massachusetts.

Erratum

Good Research Pictures Ruined

Some excellent pictures showing research results were ruined during the printing process of the December 1985 issue of IEEE CG&A. The pictures appeared on pages 40 and 41 in the article "Surface Shading in the Cuberille Environment," by Lih-Shyang Chen, Gabor T. Herman, R. Anthony Reynolds, and Jayaram K. Udupa. We are reprinting those pictures on the following two pages as they should have appeared in the original article. CG&A extends sincere apologies to the authors and to our readers. We also want to tell you what went wrong in the printing process because it might be of help to future authors.

These pictures were black and white photos, taken from the VDT, and as is almost always the case with such pictures they showed horizontal scan lines. It is these scan lines that caused the problem. They darkened and turned vertical. This is a likely outcome if such pictures are not given special handling.

Rudolph Ubach, president of In & Out Litho Plate, the house that prepares CG&A for the final printing process, explains that when scan lines are in the pictures they cannot be halftoned for printing the same way pictures without such lines are handled. In this case the scan lines were so faint, they failed to call attention to themselves.

Authors who submit such photos for publication, in any magazine, need to flag the editor that the pictures will have to be given special handling. It is too risky to assume somebody will notice the lines, particularly if there is a fairly large number of photographs, as there were in this case.

With this information in hand, the photographic preparation expert will know that the line screen to be used should be no fewer than 150 lines per inch and must be done at a 45° angle. A square-dot halftone, rather than eliptic, is also needed, which is an unusual procedure.

The final and very important step is sending a special note to the printer, informing its people that a 150-line screen has been used. The printer must know that the differences between the highlights, middle tones and shadows should be the same.

This all constitutes an unusual procedure, but it is the one Ubach recommends for producing the pictures like those you now see on the next two pages. If you compare these with the ones appearing in the December 1985 issue, you will see that warning the editor your pictures need special attention, which will result in a procedure like this one, can produce dramatically better results.