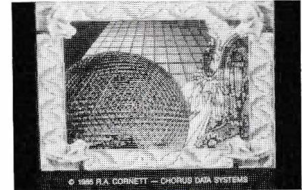

SIGGRAPH '85 Industry Slide Set Credits

Edited by: Randy Nickel and Gregory MacNicol

The industry slide set is composed of examples of applications, products and services offered by exhibitors at the 1985 SIGGRAPH conference. The images and products shown represent the very latest technology available to the computer graphics industry. Each slide is printed here in black and white to facilitate locating information about the images. The full color 35mm slide set can be ordered from: ACM Order Department, P.O. Box 64145, Baltimore, MD 21264; 1-800-526-0359, ext. 75.

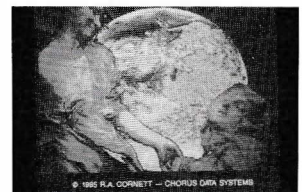
1. Chorus Data Systems
6 Continental Blvd.,
P.O. Box 370
Merrimack, NH 03054
603-424-2900

Artist/programmer:
R.A. Cornett.



This image was developed on the IMiGIT Plus Graphics System from Chorus Data Systems, Inc. incorporating Halo Graphics functions from Medias Cybernetics Inc. Photographic and drawn artwork was digitized through the PC-EYE Video Capture board and edited and collaged using the overlay, scaling and cut and paste capabilities in the IMiGIT Plus Graphics software. Slides were produced with a Lang Videoslide 35 Slide Camera looped to a Sony PVM 1271 Q RGB Monitor.

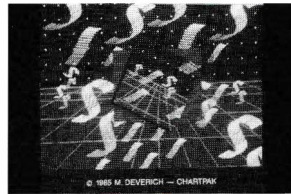
2. Chorus Data Systems,
R.A. Cornett. See text for
slide #1.



3. Chartpak
19700 Fairchild #230
Irvine, CA 92715
714-752-4999

Artist/programmer:
Michael Deverich

This image was created using "Picture This" paint software and uses bars, rubber stamp, shading and rotation.



4. Autographix Inc.
100 Fifth Ave.
Waltham, MA 02154
617-890-8558

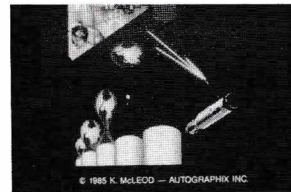
Artist/programmer:
Nancy Palie

This image was digitized on an Autographix 200 and uses the custom capabilities to create unique colors with the color palette feature.



5. Autographix Inc.
Artist/programmer:
Kathy McLeod, Larry Dick

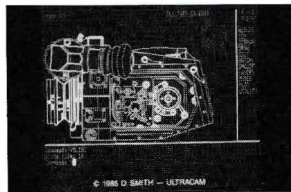
This image was designed on the Autographix 200 using Poly-curve software with optical camera work by Quali-Color Lab.



6. Autodesk Inc.
2320 Marinship Way
Sausalito, CA 94965
415-332-2344

Artist/programmer:
Dennis Smith

This was produced on a Zenith Z-100 with AutoCad 1.4 software.



7. Artronics/3M
300 Corporate Ct.
P.O. Box 408
South Plainfield, NJ 07080
201-756-6868

Artist/programmer:
Scott Lewczak

"The Leap" was created using Artronics/3M Merge Paint/Vector software. The background was done in 8-bit paint, the frog was done in vector, then merged together and output on a Matrix QCR.



8. Artronics/3M
300 Corporate Ct.
P.O. Box 408
South Plainfield, NJ 07080
201-756-6868

Artist/programmer:
Scott Lewczak

The Artronics/3M HVI Vector Drawing Software with 4000 line resolution with 256 colors was used to create this image which was then output to a Matrix QCR.



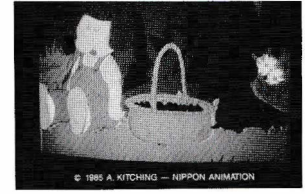
9. Antics Enterprises Inc.
175 Fifth Ave. Suite 1101
New York, NY 10010

Artist/programmer:
Alan Kitching, Nippon animation staff

Antics software was used by Nippon Animation on a VAX 11/750 to create this image which was then captured on a Hitachi one inch video recorder.



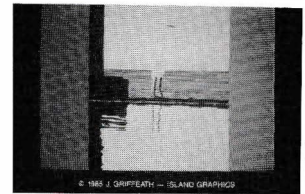
10. Antics Enterprises Inc. See slide #9.



11. Island Graphics Corp.
One Harbor Drive,
Suite 300
Sausalito, CA 94965
415-332-5400

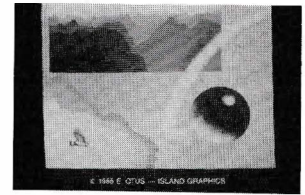
Artist/programmer:
Jeff Griffeath

"Egret" was created on an IBM PC AT using Island Graphics software and a #9 graphics board.



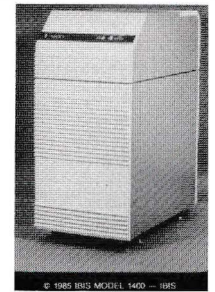
12. Island Graphics Corp.
Artist/programmer:
Erol Otus

This image was created on an IBM PC AT using Island Graphics software with a #9 board and a Summa tablet.



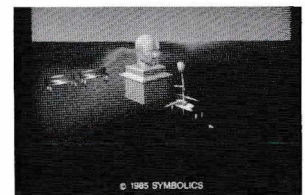
13. IBIS
5775 Lindero Canyon Rd.
Westlake Village, CA 91362
818-706-2505

IBIS Model 1400: High capacity (1400 MB) High performance (12 MB/sec data transfer rate) disk system used in scientific computing and signal processing applications.

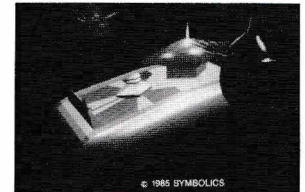


14. Symbolics Inc.
9600 DeSoto Ave.
Chatsworth, CA 91313-3578
213-478-0681

This slide is titled: "Head and Pedestal in Park"



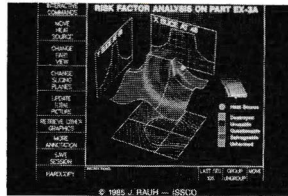
15. Symbolics Inc.
This slide is titled: "Tank and Buds." See text for slide #14.



16. ISSCO
10505 Sorrento Valley Rd.
San Diego, CA 92121
619-452-0170

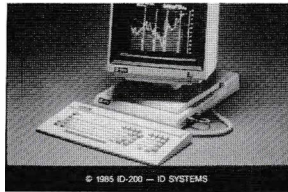
Artist/programmer:
Joseph Rauh

This image was created using ISSCO's DISSPLA/DYNAMICS Software on a Tektronix 4125 and recorded on a Matrix QCR.



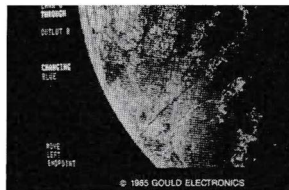
17. ID Systems
6175 W. Shamrock Ct.
Dublin, OH 43017
614-766-0440

The ID-200 color graphics terminal is used for business and engineering and process control. Slide represents business graphics from General Motors Co.



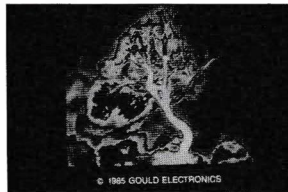
18. Gould Electronics
Gould Inc., Imaging and
Graphics Division
1870 Lundy Ave.
San Jose, CA 95131
408-263-7155

This image of Jupiter with edge enhancement and pseudo color was created on a Gould IP8500 Image Processing System.



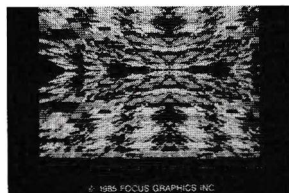
19. Gould Electronics

This enhanced X-ray photograph of a kidney uses pseudo coloring to show circulation and was created on a Gould IP8500 Image Processing System.



20. Focus Graphics Inc.
10 Twin Dolphin Drive
R303
Redwood City, CA 94065
415-595-6920

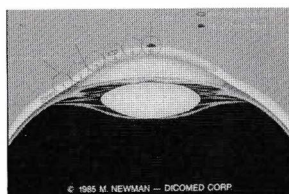
This image was produced on a Video Slide 35 film recorder from Focus Graphics.



21. Dicomed Corporation
12000 Portland Ave.
Burnsville, MN 55431
612-885-3184

Artist/programmer:
Mike Newman

This slide was created using the Dicomed Imaginator Design console and produced on a Dicomed DI485R Film Recorder at 4000 lines of resolution.



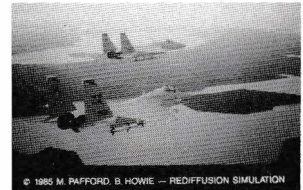
22. Evans and Sutherland
580 Arapeen Drive
Salt Lake City, UT 84108
801-582-5847

Artist/programmer:
Mike Grannan

Data used was originally taken from CT scan data and converted into polygon format and displayed in wire frame on the Evans and Sutherland PS 340. The image was then rendered locally on the PS 340 static color raster display.



23. Evans and Sutherland
Artists/programmers:
Patty Vosgerau, Steve -Hallmark, Neil Mayer; Evans and Sutherland. Mike Pafford, Bruce Howie; Rediffusion Simulation Inc.

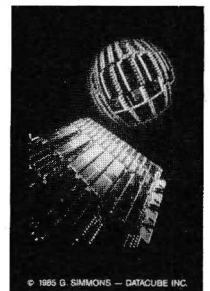


This visual from an Evans and Sutherland CT5A flight simulation system shows F-15's over the North Carolina coast. Actual terrain is modeled and a 180 degree view is displayed. The CT5A is a real time raster system. Terrain was modeled by Evans and Sutherland. The F-15 was modeled by Rediffusion Simulation.

24. Datacube Inc.
4 Dearborn Road
Peabody, MA 01960
617-535-6644

Artist/programmer:
Gloria Simmons

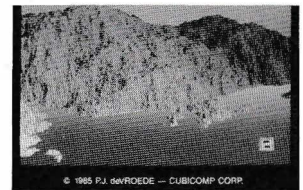
"MaxVideo" was created on a Datacube VG-128 video acquisition and display board at 384x485 resolution and 24 bits per pixel. Datacube Image Processing software with color enhanced northwest directional filter was used.



25. Cubicomp Corp.
3165 Adeline St.
Berkeley, CA 94611
415-540-5733

Artist/programmer:
Peter J. deVroede

This image was created on an IBM PC and displayed using the Cubicomp frame buffer.



26. Cubicomp Corp.
Artist/programmer:
Wilson Burrows

Cubicomp PC-10 solid modeling software, Time Arts' Luma software, terrain generating software by Peter deVroede, and an IBM PC/AT with a Cubicomp frame buffer were used to create this image.



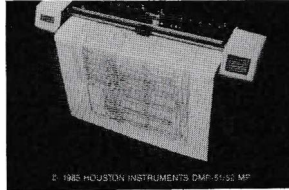
27. Cubicomp Corp.
Artist/programmer:
Jim Dixon, Amie Slate

Cubicomp PictureMaker software with full color rendering, texture mapping and transparency was used on an IBM PC/AT to model this Sony video tape recorder.



28. Houston Instruments
8500 Cameron Road
Austin, TX 78753
512-835-0900

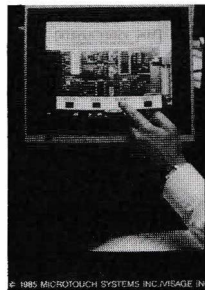
The Houston Instruments DMP-51/52 MP is a 14 pen C and D size plotter featuring resolution of .001" and a maximum plotting speed of 22 inches per second.



29. MicroTouch Systems Inc.
400 West Cummings Park
Woburn, MA 01801
617-935-0080

Artist/programmer:
Visage Inc.

This touch screen based videodisk system is used for interactive training.



30. New England Technology Group
400 West Cummings Park
Woburn, MA 01801
617-938-8833

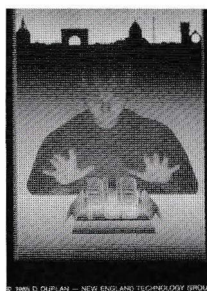
Artist/programmer:
D. Duplan

The Tech Graphics II Computer Graphics Design station using New England Technology Group's Artist/Illustrator "Paint" package was used to create this image.



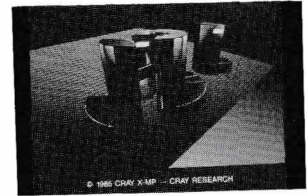
31. New England Technology Group
Artist/programmer:
D. Duplan

See slide #30.



32. Cray Research Inc.
1440 Northland Drive
Mendota Heights, MN
55120
612-681-3073

The Cray X-MP multiprocessors allow the user to employ multiprogramming, multiprocessing and multitasking techniques combined with vector processing to provide geometric increases in performance.



33. Cray Research Inc.
Artist/programmer:
Volkswagen Germany

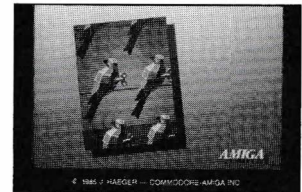
The finite element mesh of a Volkswagen Rabbit is displayed on a Ramtek 9400 using a CRAY X-MP/48. Movie BYU modeling software was used to create this image.



34. Commodore-Amiga Inc.
983 University Ave.
Los Gatos, CA 95030
408-395-6616

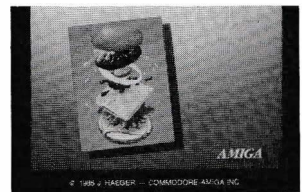
Artist/programmer:
Jack Haeger

"Birds of a Feather" was created on a Commodore Amiga Computer with 320x200 output resolution.



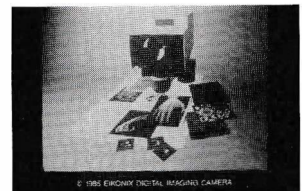
35. Commodore-Amiga Inc.
Artist/programmer:
Jack Haeger

"Four Byte Burger (Hold the Mayo)," created on a Commodore Amiga Computer.



36. Eikonix Corporation
23 Crosby Drive
Bedford, MA 01730
617-275-5070

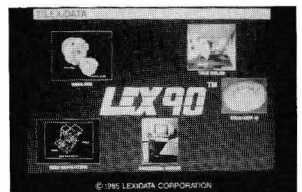
Eikonix digital imaging cameras can be used for a variety of applications.



37. Lexidata Corporation
755 Middlesex Turnpike
Billerica, MA 01865
617-663-8550

Artist/programmer:
Lexidata Corp.

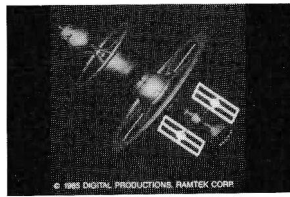
The LEX 90 is a high performance, ergonomically designed family of display processors featuring 1280x1024 60 Hz, SOLIDVIEW, and true color capabilities.



38. Ramtek Corporation
2211 Lawson Lane
Santa Clara, CA 95050
408-988-2211

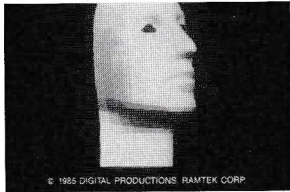
Artist/programmer:
Digital Productions

This shaded model of a space station demonstrates the advanced shading capabilities of the Ramtek 2020 Geometry Processing Terminal.



39. Ramtek Corporation
Artist/programmer:
Digital Productions

This slide demonstrates advanced surface shading techniques using the Ramtek 2020 Geometry Processing Terminal.



40. West End Film
2121 Newport Place NW
Washington, DC 20037
202-331-8078

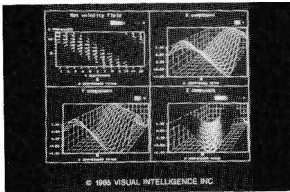
Artist/programmer:
West End Film staff

This image was created on an IBM PC/AT and recorded on a Matrix QCR using ARTWORK software from West End Film.



41. Visual Intelligence
33 Boston Post Road West
Marlboro, MA 01752
617-485-6092

Three dimensional vector fields and surface plots are standard DataViews formats and are used here to display output from a simulation of supersonic airflow on re-entry vehicles.



42. Westward Technology Inc.
90 Montvale Ave.
Stoneham, MA 02180
617-438-6623

Artist/programmer:
PDMS, CAD Center

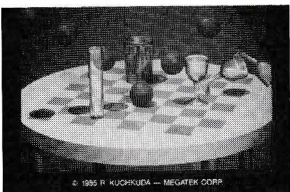
Westward Technology's ultra-high performance 3219W combines advanced raster technology with superior ergonomics and product design. When coupled with Westward's Graphics Manager, the 3219W becomes a powerful graphics processor. This model was generated using PDMS software.



43. Megatek Corporation
9645 Scranton Road
San Diego, CA 92121
619-455-5590

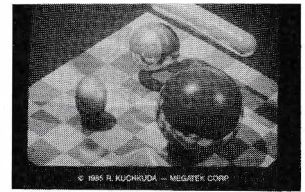
Artist/programmer:
Roman Kuchkuda

"Refractions and Revolutions" was produced on the Megatek Merlin using experimental ray tracing software.



44. Megatek Corporation
Artist/programmer:
Roman Kuchkuda

"Christmas Chess" was produced on the Megatek Merlin using experimental ray tracing software.



45. Versacad
7372 Prince Dr. Suite 106
Huntington Beach, CA
92647
714-847-9960

This is a standard Versacad system using the IBM PC/AT computer.



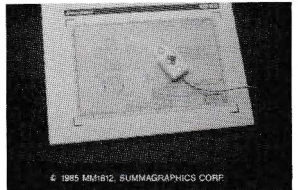
46. Versacad

This slide shows a sample drawing created using Versacad on a Hewlett Packard 200 series computer.



47. Summagraphics Corp.
777 State Street Extension
Fairfield, CT 06430
203-384-1344 Ext. #377

The MM1812 is the newest addition to Summagraphics line of digitizers. It offers high resolution, ergonomic packaging and superior reliability with a full 18"x12" active area.



48. Summagraphics Corp.

The ICON 2000 Computer-Aided Design System is a complete turnkey system for producing finished drawings.



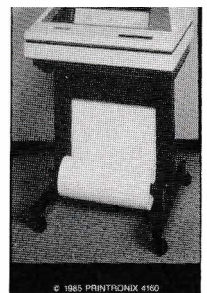
49. Polhemus Navigational Sciences
P.O. Box 560
Colchester, VT 05446
802-655-3159

The 3Space Digitizer uses magnetic transducing technology to precisely measure the x,y,z position of any point on a non-metallic model plus the orientation angles of the digitizer stylus.



50. Printronix, Inc.
17500 Cartwright Rd.
Irvine, CA 92713
714-863-1900

The Graphprint 4160 is a high resolution matrix line printer for CAD/CAM/CAE output and bar codes. When the PI-80 interface and Versaplot or equivalent software is used, it is compatible with the Versatec V-80 plotter.



51. Peritek Corp.
5550 Redwood Road
Oakland, CA 94619
415-531-6500

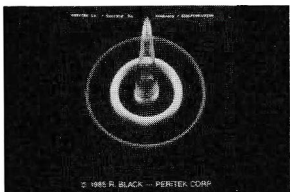
Artist/programmer:
Peritek staff

Landsat data is displayed using the Peritek VCH-Q frame buffer with 512x512x8 display, running on a Perigraf variable architecture graphics system.



52. Peritek Corp.
Artist/programmer:
Robert Black

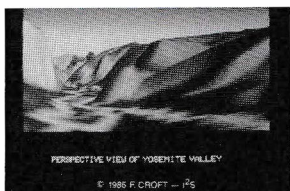
"Sombbrero" was created using a Peritek VCH-Q frame buffer running on a Perigraf variable architecture graphics system.



53. International Imaging Systems
1500 Buckeye Drive
Milpitas, CA 95035
408-262-4444

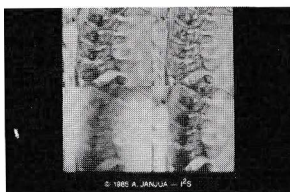
Artist/programmer:
Frank Croft

This image perspective was created using a Model 75 Image Processor with the System 600 software package.



54. International Imaging Systems
Artist/programmer:
Arif Janjua

Image enhancement on digital X-rays was performed using a Model 75 image processor and S600 software.



55. Qume Corporation
2350 Qume Drive
San Jose, CA 95131
408-942-4000

Qume Corporation manufactures a full line of graphics terminals designed for business, engineering, scientific and CAD/CAM applications.



56. General Electric Co.
Projection Display Products Operation
Electronics Park
Bldg. 7-205
Syracuse, NY 13221
315-456-2152

General Electric "Talaria" projection TV system.



57. Benson Inc.
2690 Orchard Park Way
San Jose, CA 95129-2059
408-945-1000

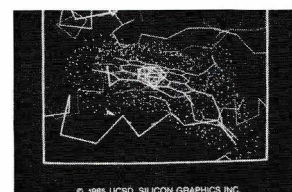
The Benson Colorscan 800, a high-resolution ink-jet plotter, and the Color Image Processor combine to give you pixel-for-pixel color duplication of the entire CRT screen image. No additional software or controllers are needed.



58. Silicon Graphics Inc.
630 Clyde Court
Mountain View, CA 94043
415-960-1980

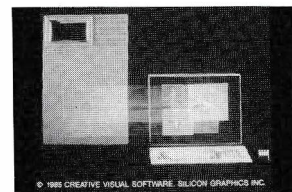
Artist/programmer:
University of California, San Diego

Molecular models of Cytochrome P450 modeled on the Iris 2400 workstation.



59. Silicon Graphics Inc.
Artist/programmer:
Creative Visual Software

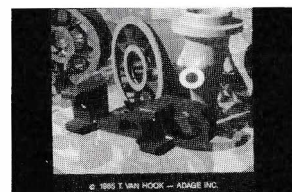
Aircraft model data was provided by Replicore from Creative Visual Software and displayed on the Iris 2400 workstation.



60. Adage Inc.
One Fortune Drive
Billerica, MA 01821
617-667-7070

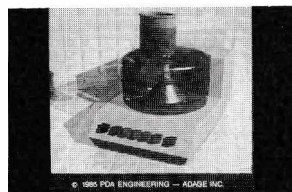
Artist/programmer:
Tim Van Hook

This slide was produced on the Adage 3000 Display System with experimental ray tracing microcode. Data is courtesy of Matra-Datavision and consists of 9300 polygons.



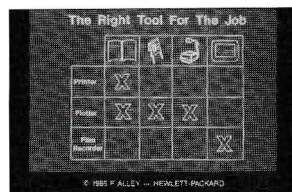
61. Adage Inc.
Artist/programmer:
PDA Engineering

Data from PDA Engineering software consisting of 426 bicubic surface patches is displayed on the Adage 3000 Display System using experimental ray tracing microcode.



62. Hewlett-Packard
16399 West Bernardo Dr.
San Diego, CA 92127
619-487-4100

This slide was created using HPDraw software and an HP 3000 computer system. The drawing was stored on a magnetic tape and sent to an independent DICOMED service bureau for processing.



63. Summagraphics Corp.
777 State Street Extension
Fairfield, CT 06430
203-384-1344 Ext. 377

The SummaMouse is a low cost, high reliability digital mouse for menu selection, graphics and text.



© 1985 SUMMA MOUSE — SUMMAGRAPHICS

64. Evans and Sutherland
580 Arapeen Drive
Salt Lake City, UT 84108
801-582-5847

Artist/programmer:
Russ Athay and Eric Swanson

Adenosine Monophosphate model displayed on the Evans and Sutherland PS 330 color shadow mask calligraphic display demonstrates the outstanding graphics of the MOGLI molecular modeling software package.

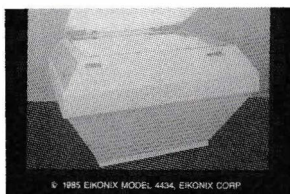


© 1985 R. ATHAY, E. SWANSON — EVANS & SUTHERLAND

65. Eikonix Corp.
23 Crosby Drive
Bedford, MA 01730
617-275-5070

Product: Eikonix E-Z Scan
Model 4434

The Eikonix E-Z Scan Model 4434 is a large format scanner for inputting drawings up to 36"x46" in size in less than 4 minutes and without electronic seaming.



© 1985 EIKONIX MODEL 4434, EIKONIX CORP.

66. Ramtek Corp.
2211 Lawson Lane
Santa Clara, CA 95050
408-988-2211

Artist/programmer:
Digital Productions

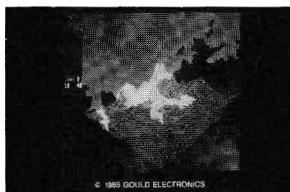
This screen image taken from the Ramtek 2020 Geometry Processing Terminal demonstrates local 3D surface shading and hidden surface removal using 2020 hardware.



© 1985 RAMTEK 2020, RAMTEK CORP.

67. Gould Electronics
Gould Inc., Imaging and
Graphics Division
1870 Lundy Ave.
San Jose, CA 95131
408-263-7155

This synthetic digital terrain model was created on the Gould IP8500 Image Processing System.



© 1985 GOULD ELECTRONICS

68. Houston Instrument
8500 Cameron Road
Austin, TX 78753
512-835-0900

"Plotter graphics ends boardroom boredom." Use of Houston Instrument's PC Plotter, a four pen digital plotter, has helped managers present cumbersome statistical data in an easy to understand fashion.

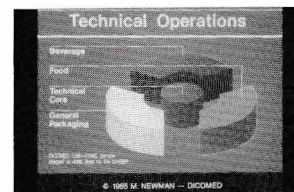


© 1985 HOUSTON INSTRUMENTS

69. Dicomed Corporation
12000 Portland Ave.
Burnsville, MN 55431
612-885-3184

Artist/programmer:
Mike Newman

This image was created on the Dicomed Design System and imaged on the Dicomed D148SR film recorder at 4000 lines of resolution.



© 1985 M. NEWMAN — DICOMED

70. Dunn Instruments
544 Second Street
San Francisco, CA 94107
415-957-1600

Artist/programmer:
Joni Carter

This image was created on an Aurora System and captured with the Dunn Instruments film recorder.



© 1985 J. CARTER — DUNN INSTRUMENTS

71. Westward Technology Inc.
90 Montvale Ave.
Stoneham, MA 02180
617-438-6623

Artist/programmer:
Applied Research of
Cambridge Ltd.

Westward's high performance 3220W color graphics display offers 256 colors from a palette of 16 million hues. The non-interlaced screen provides remarkable stability and clarity. When combined with the Westward Graphics Manager, the 3220W becomes a highly intelligent graphics processor with its own local storage. This image is from Applied Research of Cambridge Ltd.

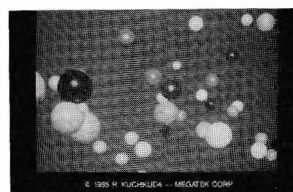


© 1985 WESTWARD TECHNOLOGY MODEL 3220W

72. Megatek Corp.
9645 Scranton Road
San Diego, CA 92121
619-455-5590

Artist/programmer:
Roman Kuchkuda

"Reflecting Balls" was produced on the Megatek Merlin using experimental ray tracing software.



© 1985 R. KUCHKUDA — MEGATEK CORP.

73. ISSCO
10505 Sorrento Valley Rd.
San Diego, CA 92121
619-452-0170
Artist/programmer:
John Huszar

This slide was produced using ISSCO'S DISSPLA software and processed at MAGI on a Celco film recorder.



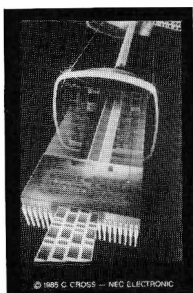
74. Benson Inc.
2690 Orchard Park Way
San Jose, CA 95152-2059
408-945-1000

Benson was the first to produce both the 400 d.p.i. and 508 d.p.i. electrostatic plotters. Because of Benson's exclusive quadrascan head, it is now possible to get final-drawing quality at electrostatic speed.



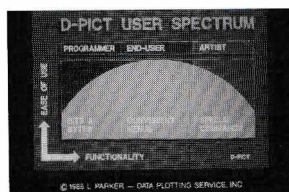
75. NEC Electronics
401 Ellis St.
Mountain View, CA 94039
415-960-6000 Ext. 6184
Artist/programmer:
Chris Cross

NEC Dual Port Video RAM.



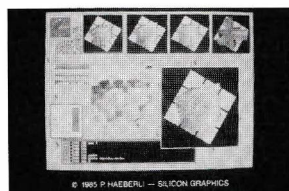
76. Dataplotting Services Inc.
225 Duncan Mill Rd.
Don Mills, Ontario Canada
M3B3K9
416-441-4163
Artist/programmer:
Litsa Parker

D-PICT Software running on a VAX/VMS system was used to create this image.



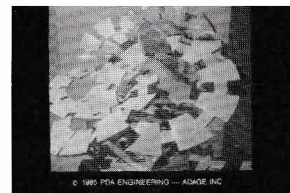
77. Silicon Graphics Inc.
630 Clyde Court
Mountain View, CA 94043
415-960-1980
Artist/programmer:
Paul Haeberli

The Iris 2400 engineering workstation is designed for interactive color graphics and computing applications.



78. Adage Inc.
One Fortune Drive
Billerica, MA 01821
617-667-7070
Artist/programmer:
PDA Engineering

Data from PDA Engineering consisting of 720 bicubic surface patches is displayed on an Adage 3000 Raster Display System with experimental ray tracing microcode.



79. GTCO Corporation
1055 First Street
Rockville, MD 20850
301-279-9550

The Macintizer (Macintosh integrated digitizer) plugs into the Macintosh mouse port allowing absolute input without software modification.



80. Nicolet Computer
Graphics Division
777 Arnold Drive
Martinez, CA 94553
415-372-7568

The Nicolet Zeta 836 8-pen plotter features an integral controller with RS-232 and/or IEEE 488 interfaces and speeds to 25 ips, 2g acceleration. Push button scaling, windowing and liquid ink options are available.

