LABORATORY FOR COMPUTER GRAPHICS & SPATIAL ANALYSIS

HARVARD GRADUATE SCHOOL OF DESIGN, 520 GUND HALL, CAMBRIDGE, MA 02138 (617) 495-2526 TELEX: 92-1496 FTS: 830-2526

June 8, 1981

Steina and Woody Vasulka
1600 Old Pecos Trail
Santa Fe, New Mexico 87501

Dear Steina and Woody,

I am looking for new animated computer-generated images to show at the
HARVARD COMPUTER GRAPHICS WEEK '81. The films/videotapes selected will
be shown the evening of July 29th. I have enclosed an announcement for
the Conference for your information.

Please send me a brief description for each of the films/videotapes you
have in this genre and specifications as to how I might acquire the work
for the screening.

Thank you in advance for taking the time to answer this inquiry promptly.


Sincerely yours,

Gloria Simmons
Applications Programmer

GS/RJH

Enc.

P.S. I saw some of your work at M.I.T. during the fall lecture series. I
     am interested in the analog-digital-analog image processing you are
     doing. Could you include information on the content, software, hard-
     ware and technical support you employ in producing your videotapes? I
     am also interested in the problems you have identified working with
     this medium.
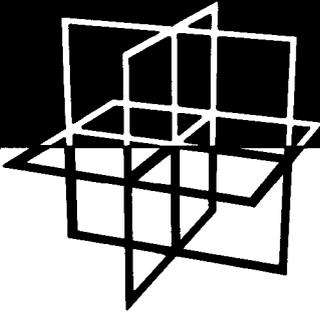
April 28, 1982

Steina And Woody Vasaulka
1600 Old Pecos Trail
Santa Fe, New Mexico 87501

Dear Steina and Woody Vasaulka,

I am looking for new animated computer-generated images to show at
the HARVARD COMPUTER GRAPHICS WEEK '82. The videotapes selected
will be shown twice a day, during each morning and afternoon break.
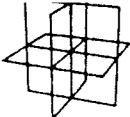I have enclosed herewith a preliminary announcement of the Conference.

Please send me a brief description of any videotapes you think might
be appropriate, including length of each tape and price therefor.

Thank you in advance for taking the time to answer this inquiry
promptly.

Sincerely yours,

Ann S. Quenin
Conference Manager

ASQ/lhw

LABORATORY FOR COMPUTER GRAPHICS & SPATIAL ANALYSIS

July 31, 1981

Steina Vasulka
1600 Old Pecos Trail
Santa Fe, N. M. 87501

Dear Steina,

I received your tape and showed approx 20 minutes to the group
at the Harvard Computer Graphics Week '81. I will be sending
you a check for $40.00 (@ $ 2.00 a minute rental fee).

Thank you for sending it for me to include in the screening, I
felt that it made a valuable contribution.

Good luck with your work, I will be looking forward to seeing
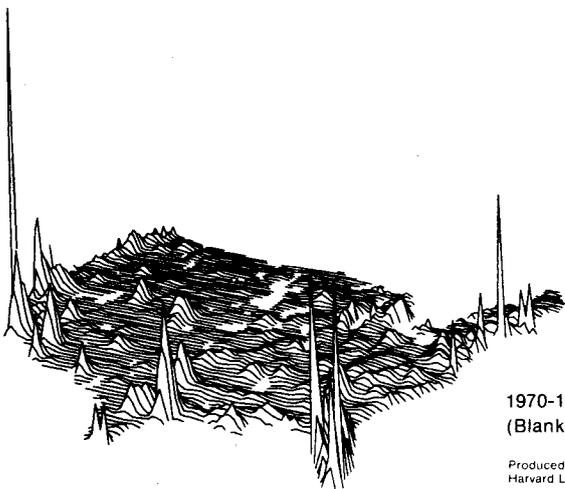more soon!

Sincerely yours,

Gloria Brown-Simmons

HARVARD COMPUTER GRAPHICS WEEK '81

The Harvard University Graduate School of Design Laboratory for Computer Graphics announces

An International Conference on Management Graphics and Computer Mapping
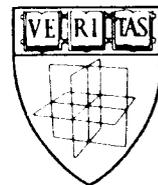
1970-1979 U.S. NET POPULATION GROWTH X 10
(Blank areas = population loss)

Produced by Aspex Program
Harvard Laboratory for Computer Graphics & Spatial Analysis

July 26–31, 1981
Hyatt Regency, Cambridge, Massachusetts

Topics to be covered by the world's leading computer graphics experts include: Hardware • Software • Data Bases

Plus — the most significant applications and advances in:
Corporate Planning
Natural Resource Management
Remote Sensing
Boardroom Graphics
Environmental Planning
City & Regional Planning
Computer Graphics Information
  Systems for Management
Emerging Color Hardware Technology
Computer Graphics Hard Copy
  Technology for the Graphic Arts
Financial Graphics
Marketing
Energy
and much more

This Is An Invitation To You...

A Word About The Laboratory

The Laboratory for Computer Graphics and Spatial Analysis was established within the Graduate School of Design at Harvard University in 1965. The goals of the Laboratory are to conduct research concerning the definition and analysis of spatial structure and process and to design and develop computer software for the analysis and graphic display of spatial data.

The Laboratory is also engaged in disseminating the products of its research through publications, software, and educational programs.

The Laboratory is also actively engaged in publications and professional development programs for professionals in computer cartography, geographic and management information systems, and users in business, government, and education.

... from the directors of the Harvard Laboratory for Computer Graphics to take part in what has been called "without a doubt, the most important computer graphics meeting." It will substantially enhance your understanding of new developments in the rapidly evolving areas of management graphics, computer mapping, and computer-aided design, plus give you an opportunity to meet with graphics experts from around the world to solve your own *particular* information management problems.

Sponsored by the Harvard Graduate School of Design, *Harvard Computer Graphics Week '81* is a five-day international conference for users and potential users structured to meet the specific needs of both management and technical professionals in business, government, and education.

It will be held from July 27 through July 31 at the Hyatt Regency Hotel in Cambridge, Massachusetts, with a special pre-conference session on July 26. Please mark the dates on your calendar.

Participants in this unique, dynamic, and highly acclaimed educational activity will learn — during formal sessions, informal meetings, and by listening to scores of actual case examples — how computer graphics is being used to solve problems in corporate planning and management, marketing, energy exploration and distribution, physical design, natural resource management, city and regional planning, education, research, financial management, and many other areas.

You will learn about the tremendous impact graphics is already having in such vital areas as productivity, cost reduction, and the more effective management of both corporate and natural resources. You will also learn how to get started in computer graphics yourself, or to augment your current business graphics, computer mapping, or computer-aided design capabilities.

Harvard Computer Graphics Week '81 is designed to allow you to choose among numerous sessions on the latest developments in hardware, software, and data bases, on where and how to acquire the components and services you need to solve your organization's graphics problems, and on how computer mapping and management graphics are actually being used in industry and the public sector.

Even more significantly, the program will give you the opportunity to meet hundreds of other users and potential users at workshops, problem-solving sessions, mini-seminars, roundtables, hardware and graphic exhibits, and informal meetings, where you will:

- Discover the best sources for hardware, software, and data bases

- Learn how others are using business graphics and computer mapping in ways you can profitably utilize yourself

- Take part in intensive, hands-on demonstrations of hardware and software

- Learn how to communicate effectively with graphics, how to use color effectively, how to assemble and update a geographic information system, how to translate financial statements into financial pictures, and how to develop standards and formats for the graphic presentation of management and statistical data.

In addition to supplying you with numerous opportunities for interaction, *Harvard Computer Graphics Week '81* will also supply you with an enormous materials package that will include literally thousands of pages of case studies, bibliographies, source materials, publications, and graphics that will represent an invaluable treasury of information for you and the other members of your organization.

Because of the overwhelming acclaim for past programs, and the growing recognition of *Harvard Computer Graphics Week* as the pre-eminent activity in this field, many have already made plans to attend this year's program. We shall again attract an important international audience to this timely, prestigious event. As attendance will be strictly limited in order to provide an atmosphere conducive to effective learning, we suggest that you complete the registration form on the back page immediately. If you need more time to make a decision about attending or about session selection (you may want to attend with a team to take full advantage of all opportunities offered at the Conference), you may reserve space on a tentative basis.

We look forward to welcoming you here in July for what we know you will find a rewarding and stimulating experience.

Allan Schmidt, Conference Chairman

Eric Teicholz, Conference Director

Past Participants' Reactions

"You are, without doubt, the leading computer graphics conference." Robert Dupree, Staff Systems Analyst, Amoco Production Company.

"Once again, the best conference in this field – well planned, well managed, extremely useful to the practicing professional." Paul Wilson, Association of Bay Area Governments.

"A wealth of information for any current or prospective user of graphical displays!" Robert McGill, Bell Laboratories.

"The cosmopolitan nature of both participants and program, the excellent venue, and the opportunity to engage in fruitful discussions made this, by far, the best conference I have ever attended." William McLellan, Computer Applications Coordinator, PanCanadian Petroleum Limited.

"An extremely comprehensive week on the state-of-the-art of computer graphics. It was well worth the time and money." Steven Peppard, Director, Management Information Systems, CBS Radio.

"The most interesting and best managed conference I have ever attended." Bonnie Alley, Geophysicist, U.S. Geological Survey.

"An extraordinary introduction to computer graphics for the person who needs to know quickly." Bradford Brown, Senior Consultant, Engineering Department, Dupont.

"What was promised in the advance literature was delivered. A good mix of seminar, lectures, demos." Barbara Campbell, Director of Commercial Marketing, Chemical Bank.

"It was an excellent introduction to computer mapping and business graphics, but also provided a unique opportunity to meet and discuss with other individuals, to exchange ideas and discuss problems." Richard Carfagno, House Information Systems, U.S. House of Representatives.

"A fascinating variety of individuals – one of the rare mixes of business and university people." David Rhind, Professor, Department of Geography, University of Durham.

"This is an excellent update on the cutting edge of technology." Robert Rossi, Manager, Management Systems Department, NUS Corporation.

"A week filled with information and insight." Mary Schauder, Senior State Assistant, Anaheim Police Department.

"The amount of useful information available from the speakers, faculty and participants during this week could not be obtained anywhere else." Victor Tine, The First National Bank of Boston.

". . . Everything from the administration of the conference to the hotel facilities to the quality of the speakers was more than I expected or could have hoped for." Jim Trant, Assistant Product Manager, Dun's Marketing Services.

"I heartily recommend the Harvard Computer Graphics Week to researchers in developing countries as the best way to remain abreast of innovations in this dynamic field." James Padian, Manager, Seismic Data Processing, INTEVEP.

"The conference provided a wealth of graphics knowledge . . . touching all areas. Presentations were relevant, well organized and often visionary. This information should be invaluable for successful implementation of graphics in our company." Mark Borgmann, Senior Programmer, New England Telephone Company.

"For those interested in the state-of-the-art in computer graphics, hardware and software and GIS technology, it was the most informative week I have every spent." William Campbell, Training Manager, NASA-Eastern Regional Remote Sensing Applications Center.

"A clearing house of computer graphics knowledge." R.W. Cross, Cartographer, Rockwell Hanford Operations.

"This was the best organized and smoothest run conference I have ever attended. Thank you." Toby Atterbury, Forest Inventory Systems Supervisor, Crown Zellerbach.

"My understanding on graphics . . .

Mary Donelan, Department of Biostatistics, University of North Carolina.
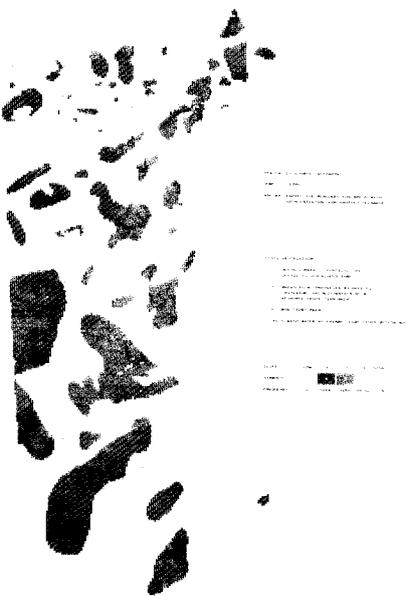
Analytical map produced by the Water Resources Agency for New Castle County (Delaware) as part of a project to assess the potential impact of septic systems on groundwater quality.

You Will Learn

- How and why computer mapping and business graphics are magnifying the power of information in such areas as marketing, corporate planning and management, natural resource management, design and drafting, financial reporting, city and regional planning, physical design, research, energy exploration, and more.

- About the criteria you should use in selecting graphics hardware, and what the experts think the future really has in store for hardware users.

- Where graphics software is headed, what the most important recent developments are, and what role micro-based graphic software will play.

- How to get started in computer mapping, and what managers need to know to implement a truly effective management graphics system.

- The specific elements that are most critical in designing a truly powerful graphic presentation.

- How to turn any financial statement into an easy-to-understand financial picture in a matter of minutes.

- About the critical issues you should consider, incorporating both legal and economic considerations, when you are ready to acquire both software and data bases.

- How to use color most effectively in building a powerful graphic essay.

- About those specific uses of computer graphics in management information systems that have proved most workable and cost effective.

- How to develop standards and formats for the graphic presentation of statistical data, as well as the principles of effective business communications.

- About significant technological advances in computer graphic hard copy technology for achieving presentation-quality graphics.

- How to assemble and update a geographic information system.

- What role computer graphics will play in the office of the future.

- Precisely what CAD/CAM can (and cannot) do for you and how to get it to work in your own organization.

- About the latest applications in satellite remote sensing, and how they relate to your particular activity.

- How computer graphics techniques are being applied in the commercial sector to dramatically enhance decision-making, reduce costs, and boost productivity.

- About time-sharing services that are now available for graphics users and what to reasonably expect from them.

- The future directions many experts predict that graphics will take, including the impact of such new technologies as videodisc mapping and flat panel display.

Sunday, July 26

2:00 p.m. - 6:00 p.m.

**Pre-conference registration.**

3:00 p.m. - 4:30 p.m.

How To Get Started In Computer Graphics.
Introduction seminar open to all registrants.
You'll cover basic concepts, components, and vocabulary.

6:00 p.m. - 8:30 p.m.

Cocktail reception and poster exhibit preview.
Informal get-together for all Conference registrants and Faculty. Opportunity to review numerous graphics exhibits and to interact with exhibitors.
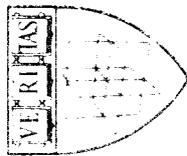
PHICS WEEK '81
Cambridge, Massachusetts
1981

VERITAS

Day 1

July 27

9:00 a.m. - Noon

1 The Explosion in The Management and Consumer Applications of Computer Graphics: Conference Preview.
Introduction and Conference overview. This is the first of 11 applications sessions scheduled throughout the week. It will preview subsequent sessions with case examples of the use of computer mapping and management graphics techniques by industry managers, government representatives, and leading educators. Included will be a review of the marketplace for consumer information in the 1980s, plus case studies detailing the development of financial graphics; a nationwide, interactive, graphic address locator; the use of computer mapping techniques in earthquake analysis, and business graphics as an aid to management productivity.

Noon - 2:00 p.m.

Roundtables. Meet with speakers from morning session for informal discussions and counseling. (Until 1:00 p.m.)

Hardware Exhibits open (Until 6:00 p.m.)

Luncheon (Until 2:00 p.m.)

2:00 p.m. - 3:30 p.m.

2 * How Computer Graphics Is Being Used To Better Manage Natural Resources and the Environment.
The second of 11 applications sessions. Will examine such application areas as high level nuclear waste disposal, forest management, wildlife evaluation, and more.

3 * The Best Applications of Corporate Warroom Graphics.
The third of 11 applications sessions. Corporate experts will detail the use of computer-generated graphics to aid in the development of long-range business strategies.

4 * Mini-Seminar: Computer Graphics Fundamentals for Management.
What managers from all sectors need to know. Overview of hardware, software, and applications, plus how computer graphics can save time and money. How to optimize the man-machine interface to take advantage of the unique capabilities of each.

3:45 p.m. - 5:15 p.m.

5 * How Computer Graphics Is Being Used To Solve Today's Critical Planning Issues.
The fourth of 11 applications sessions. Case studies will focus on the use of graphics in computer assisted redistricting, the analysis of

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Day 2

July 28

9:00 a.m. - Noon

11 Computer Graphics Hardware: Learning To Match Your Needs With Current Hardware Capabilities — A State-of-the-Art Perspective.
A panel of leading experts will examine and analyze the current marketplace, with an eye toward identifying the critical guidelines you must follow when you are choosing equipment. You will learn how to decide which type of equipment is best for you, how to select it, the most important cost and personnel considerations, and how to get added mileage from the equipment you already have. To cover graphic CRT display devices, automatic digitizer devices, hard copy graphic output devices, integrated graphics systems, and micro-based graphics hardware. A critical overview for all current and potential graphics users.

Noon - 2:00 p.m.

Roundtables. Meet with speakers from morning session for informal discussions and counseling. (Until 1:00 p.m.)

Hardware Exhibits open (Until 6:00 p.m.)

Luncheon (Until 2:00 p.m.)

2:00 p.m. - 3:30 p.m.

12 * Standards and Formats for the Graphic Presentation of Statistical Data.
An incisive examination of standards, issues, and suggested solutions in such specific areas as slidemaking, financial graphics, population mapping, and business communications.

13 * What You Should Know About Emerging Color Hardware Technology.
A panel of experts delve into the overwhelming implications for users in all sectors, including the driving forces behind the technology and the future impacts that will surely emerge in the wake of these new developments.

14 * Mini-Seminar: How To Assemble and Update a Geographic Information System.
This specially structured presentation will give you an overview of current GIS hardware and software developments, along with insights into how to make your system work properly and how to avoid the big mistakes in building or modifying your GIS.

3:45 p.m. - 5:15 p.m.

15 * The Best New Applications of Computer Graphics in Education and Research.
The sixth of 11 applications sessions. Case histories include how computer graphics has been used to analyze population/employment

Day 3

9:00 a.m. - Noon

20 The Best and the Newest in Computer Graphics Software.
Learn about representative, state-of-the-art examples of currently available thematic mapping software, statistical software, imagery software, and micro-based software — including information about the latest developments in Harvard's ODYSSEY system, what's new from the U.S. Bureau of the Census, what NOAA is doing in regard to the graphical presentation of meteorological information, and micro-based packages for both time-series analysis and a geographic information system using a distributed net of microprocessors. Descriptions will focus on actual and potential applications, capabilities, and limitations.

Noon - 2:00 p.m.

Roundtables. Meet with speakers from morning session for informal discussions and counseling. (Until 1:00 p.m.)

Hardware Exhibits open (Until 6:00 p.m.)

Luncheon (Until 2:00 p.m.)

2:00 p.m. - 3:30 p.m.

21 * What You Should Know About Acquiring Computer Graphic Software.
Sources to contact, legal issues to be aware of, and economic implications to consider, including when and how to acquire software, and whether to buy, lease, or develop your own.

22 * Mini-Seminar: Data Base Concepts for Geographic Information Systems.
An intensive examination of the most significant current and future data base concepts as they relate to geo-data systems, including actual applications in the geo-data context.

23 * Mini-Seminar: Computer Graphics for Financial Managers — How to Create the Most Meaningful Financial Picture.
How this extraordinary concept is revolutionizing financial reporting; principles and guidelines to adopt, the tools to use, and the standards to adopt if you are to successfully implement a system for translating complex financial data into simple, easy-to-understand pictures.

3:45 p.m. - 5:15 p.m.

24 * Using Computer Graphics to Enhance Management Information Systems.
The eighth of 11 applications sessions. How computer graphics is being used in both corporate and government information systems in

Day 4

9:00 a.m. - Noon

30 * Business Graphics and the Revolution in Information Management.
The ninth of 11 applications sessions. The first of a two-part examination of the explosive impact of computer mapping and management graphics in the commercial sector will explore the ways in which management graphics is dramatically expanding the power of information in such areas as marketing, siting, demographic analysis, research, and many other areas. How can you adopt the techniques discussed?

31 * Mini-Seminar: Developing Trends in Digital Image Processing.
A leading expert will provide insights into key trends in technology, techniques, and hardware for the 1980s.

Noon - 2 p.m.

Roundtables. Meet with speakers from the morning session for informal discussions and counseling. (Until 1:00 p.m.)

Hardware Exhibits open (Until 6:00 p.m.)

Luncheon (Until 2:00 p.m.)

2:00 p.m. - 3:30 p.m.

32 * Business Graphics and the Revolution in Information Management.
The tenth of 11 applications sessions. Part 2 of an examination of the ways management graphics is dramatically expanding the power of information in the commercial sector.

33 * The Integration of Remotely Sensed Data Into Mapping.
The last of 11 applications sessions. This session will examine a number of important case examples involving the integration of satellite data into mapping and will identify — for a variety of applications — advantages and disadvantages of using such data.
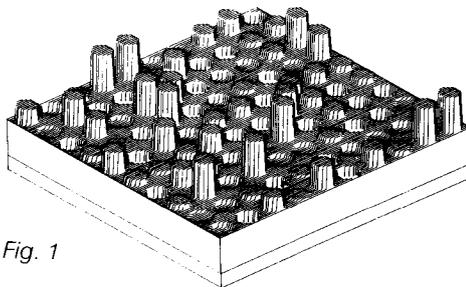

Fig. 1

3:45 p.m. - 5:15 p.m.

34 * Future Directions in Computer Graphics.
A look at short-\and medium-range implications of new technologies and developing marketplaces, including an examination of home and office consumer graphics, videodisc

Day 5

9:00 a.m. - Noon

36 Geographic and Statistical Data Bases.
An update on representative and state-of-the-art examples of cartographic (x-y coordinate) and statistical data bases, covering data base background, availability, characteristics, and computer compatibility. To cover currently available U.S. Census products and a report on the status of 1980 Census data, network data bases, recent and ongoing imagery data base developments at NASA, the creation of engineering data bases, data base development at the state level, and much more.

Noon - 2:00 p.m.

Roundtables. Meet with speakers from morning session for informal discussions and counseling. (Until 1:00 p.m.)

Luncheon (Until 2:00 p.m.)

2:00 p.m. - 4:00 p.m.

37 * Problem Solving Workshop in Computer Mapping.
Meet with Conference Faculty experts to discuss specific mapping problems and to receive guidance regarding solutions, options, and resources.

38 * Problem Solving Workshop in Business Graphics.
Meet with Conference Faculty experts to discuss specific business graphics problems and to receive guidance regarding solutions, options, and resources.

Special Conference Events Scheduled For You Throughout The Week

● Rooms and rooms full of graphics hardware displays and intensive, hands-on demonstrations.

● Special, pre-Conference session on "How To Get Started In Graphics" for beginners and non-experts — aimed at giving you the background you need to gain the maximum benefit from the week's many seminars, workshops, and formal and informal meetings.

● Dozens of graphics exhibits prepared by Conference Faculty members in concert with papers to be distributed during the Conference and illustrating the full spectrum of topics to be covered.

● Roundtable sessions following each program segment to give you the opportunity to interact personally with Conference Faculty and discuss issues of specific interest to you and your

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urban development issues, site location, and more.

6 * Using Computer Graphics In Physical Design.

The fifth of 11 applications sessions. Case studies span the use of computer graphics in a microprocessor-based system for architectural applications to its role in the development of educational exhibits.

7 * Mini-Seminar: How To Communicate Effectively With Graphics.

A valuable, results-oriented session that will give you practical insights into designing a graphics presentation to produce the best results; what does (and does not) work.

8 * Mini-Seminar: Hands-On Introduction to Computer Graphics Information Systems for Management.

Strictly limited to 40 participants on first-come, first-served basis. Session will be repeated at 5:30. (Please indicate second preference, should session already be filled.)

9 * Problem-Solving Workshop in Business Graphics.

Meet with experts from the Conference Faculty to discuss specific graphics problems which are troubling you or your organization, and to receive guidance regarding solutions, options, and resources.

5:15 p.m. - 6:15 p.m.

Roundtables. Meet with speakers from all afternoon sessions for informal discussions and counseling.

5:30 p.m. - 7:00 p.m.

10 Mini-Seminar: Hands-On Introduction to Computer Graphics Information Systems For Management.

Strictly limited to 40 participants (Repeat of Session 8)

6:15 p.m. - 8:00 p.m.

Poster Exhibitors' Night.
Meet authors of graphic displays to discuss the work represented. Cocktails and refreshments.

CONFERENCE FACULTY

Dr. Robert Aangeenbrug, Department of Geography, University of Kansas
Wayne Bannon, Director, Data Systems Consulting, Ernst & Whinney
Craig Barrow, Project Director, Owens-Illinois, Inc.
Ronald Blue, Associate Research Administrator, State Farm Insurance Companies
Gerald Borrell, Library of Congress
Judith Cohen, Data User Services Officer, U.S. Bureau of the Census
Larry Cornish, ISSCO
Dr. David Cowen, Director, Social & Behavioral Science Laboratory, University of South Carolina
Jack Dangermond, Director, Environmental Systems Research Institute
Stanley Davis, Senior Programmer Analyst, Standard Oil Company (Indiana)
O.H. Davison, President, Iconix
C.A. de Bruijn, International Institute for Aerial Survey & Earth Sciences

patterns in energy efficiency studies, now it is being used in a business school environment, and more.

16 * The Latest Developments in Hard Copy Technology for Achieving Presentation-Quality Graphics.

The seventh of 11 applications sessions, detailing new directions and innovations by such leaders as Xerox in such areas as raster/vector hybrid systems.

17 * Principles of Graphic Design: The Effective Use of Color in Computer Graphics.

Leading experts will teach you key concepts and practical theories you can apply to the creation of business and financial graphics, multi-variate displays, and others.

18 * Mini-Seminar: Today's New Directions in Available Hardware and Software for Business Graphics.

A key presentation for all business management graphics users, presented by a foremost expert. What's here, what's coming, what it all means to you.

19 * Problem Solving Workshop in Computer Mapping.

Meet with Conference Faculty experts to discuss specific mapping problems and to receive guidance regarding solutions, options, and resources.

5:15 p.m. - 6:15 p.m.

Roundtables. Meet with speakers from all afternoon sessions for informal discussions and counseling.

5:30 p.m. - 7:00 p.m.

A Symphonic Soirée.
Relax to live chamber music, continue the day's discussions and develop new contacts in a cordial setting over wine and cheese.

8:00 p.m. - 11:00 p.m.

First Annual Harvard Computer Graphics Week Bridge Night. (Sign up to participate on the registration form on the other side of this page.)

James Dow, Supervisor, Technical Engineering Methods, Southern Company Services
Arthur Dukakis, Regional Director, U.S. Bureau of the Census
James Dunion, Computer Activities Coordinator, American Museum of Science & Energy
Henry Emery, Director, Automated Mapping and Facilities Management Division, Kellogg Corporation
Elizabeth Erickson, Senior Systems Specialist, Petro Lewis Corporation
David Friend, President, Friend Information Systems
Randy Frosh, Western Energy & Land-Use Team, U.S. Fish & Wildlife Service
Dr. Urs Gauchat, Department of Architecture, Harvard Graduate School of Design
William Green, Manager, Signal Processing Department, System Development Corporation
Randall Gregg, Economic Specialist, Upland Industries Corporation

the context of decision support.

25 * Mini-Seminar: An Introduction to CAD/CAM For Management Users.

Two leading experts in Computer Aided Design and Computer Aided Manufacturing (CAD/CAM) present an overview on the explosive potential of CAD/CAM, plus advice on how to get it to work in your own organization.

26 * Services for Graphics Users: Where to Go and What Will Happen When You Get There.

Service bureaus and time sharing systems; who they are and what they have to offer.

27 * Mini-Seminar: Translating Financial Statements into Financial Pictures — A Hands-On Workshop.

Learn how to turn any financial document into a financial picture in minutes. Strictly limited to 40 participants on a first-come, first-served basis. Session will be repeated at 5:30. (Please indicate second preference, should session already be filled.)

28 * Problem Solving Workshop in Software Acquisition and Development.

Meet with Conference Faculty experts to concentrate on your own specific problems and possible solutions.

5:15 p.m. - 6:15 p.m.

Roundtables. Meet with speakers from all afternoon sessions for informal discussions and counseling.

5:30 p.m. - 7:00 p.m.

29 Mini-Seminar: Translating Financial Statements into Financial Pictures — A Hands-On Workshop.

Strictly limited to 40 participants (Repeat of Session 27)

8:00 p.m. - 10:00 p.m.

Wednesday Night at the Movies
Join us for popcorn and goodies and the showing of a treasure trove of graphics classics . . . and more.

* = concurrent sessions

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mapping systems, and pending developments in microprocessor-based hardware and software.

35 * Mini-Seminar: Computer Graphics in the Office of the Future.

The role of graphics in the office of the future, and how it differs from the office of the present. Future technologies, future capabilities, future trends and driving forces that will make graphics an integral, rather than an unusual, feature in management information systems.
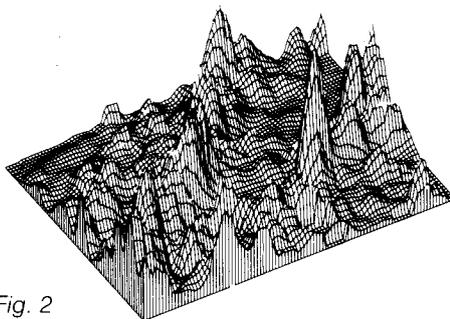

Fig. 2

Fig. 1: An experiment in three-dimensional political cartography, produced by John Wildgen and Richard Engstrom, University of New Orleans.
Fig. 2: SURFACE II contour map of uranium in the Knoxville, Charlottte, Greenville, Spartanburg, and Augusta, by Dr. Glenn Koller, Savannah River Laboratory.

5:15 p.m. - 6:15 p.m.

Roundtables. Meet with speakers from all afternoon sessions for informal discussions and counseling.

5:30 p.m. - 7:00 p.m.

Summer Eve Dixieland Jazz Party
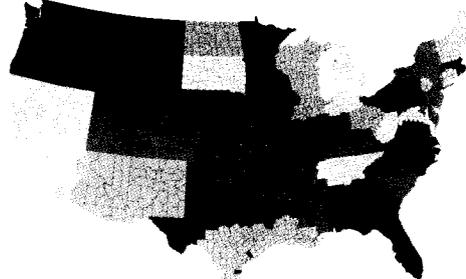Have fun and relax to the sounds of jazz, have a cocktail or two, meet friends.

Fig. 3: Prospect penetration map showing employee ratio of customers to prospects. Prepared by Equifax Geographic Systems Group.

Conference Highlights

● Intensive problem-solving sessions where you can meet with experts and find answers to your own particular graphics problems.

● Special exhibitors' night at which you can personally examine displays, confer with exhibit authors, and relate their work to your own specific needs.

● Voluminous materials package, including literally thousands of pages of case studies, bibliographies, reports, handouts, checklists, guidelines, and examples of graphics — a truly invaluable treasury for you to take home for your continued use and reference.

● A unique series of action-oriented seminars threaded throughout the program from which you can learn how to: Get Started in Graphics, Communicate Effectively With Graphics, Assemble and Update a GIS, Use Color Effectively, Translate Financial Statements into Financial Pictures, Acquire Computer Graphics Software; plus gain important insights into: Computer Graphic Fundamentals for Management, Computer Graphic Information Systems for Management, New Directions in Available Hardware and Software, Data Base Concepts for GIS, Developing Trends in Digital Image Processing, and Computer Graphics in the Office of the Future.

● Specific guidelines for selecting the hardware and software that is best suited to your particular needs.

● A specially designed format consisting of 38 formal sessions and numerous informal meetings which allows you to structure your own program and select the activities which are particularly suited to you.

● The opportunity — rare in its scope — to meet with hundreds of other current and potential computer mapping and business graphics users from all sectors and to engage in a free exchange of ideas and experiences.

● Numerous social events and get-togethers, including a Sunday night pre-conference cocktail reception to enable participants to preview poster exhibits. Then, throughout the week, Morning Miles for joggers and Evening Libations for all.

● Modern, comfortable conference and hotel facilities with easy access to Harvard Square and the cultural and culinary resources of Cambridge and Boston.

● A computer graphics arcade where you can personally use the latest graphics software and graphic CRTs.

Christopher Hamlin, Department of Anthropology, University of Pennsylvania
Stephen Hartwell, Programmer/Analyst, Harvard Business School
Stephen Horton, COSMIC, University of Georgia
Raymond Jacques, Timesharing Manager, General Mills Corporation
Dr. Irwin Jarett, President, Irwin M. Jarett, CPA, Ltd.
C. Gene Johnson, USDA Soil Conservation Service
Dr. Spencer Joyner, Jr., Executive Vice President, Geographic Systems, Inc.
Patrick Kenealy, Senior Technical Editor, GML Corporation
Steven King, Vice President, Scitex
Warren Lavey, Attorney, Lexecon, Inc.
Dr. Carl Machover, President, Machover Associates
Dr. George McCleary, Department of Geography, University of Kansas
Robert McGill, Bell Laboratories
Joseph Miller, Faculty Associate, Arizona State University

Dr. George Nagy, Chairman, University of Nebraska Department of Computer Science
William Nisen, Manager, Technical Services, Computer Pictures, Inc.
Judy Olsen, Department of Geography, Boston University
Dr. Joel Orr, President, Orr Associates, Inc.
Alan Paller, President, AUI Data Graphics, Inc.
Dr. John Patterson, Decision Analyst, Decisions & Design, Inc.
Dr. Robert Ray, Planning Specialist, Research Triangle Institute
Carl Reed, Principal Scientist, Autometric, Inc.
Walter Ritter, President, Anderson-Ritter Associates
Dr. Eric Rosenfeld, Harvard Business School
Dr. Daniel Schodek, Department of Architecture, Harvard Graduate School of Design
Stephen Slimp, Management Analyst, U.S.D.A. Forest Service
Dennis Smith, Senior Project Scientist, Woodward-Clyde Consultants

Vern Svatos, Data Analyst, Water Resource Agency for New Castle County
Jack Thompson, Wiley & Wilson, Inc.
Dr. Roger Tomlinson, Chairman, International Geographical Union
John Trombly, President, Octek, Inc.
Gary Vaillancourt, Xerox Corporation
Robert Widener, President, Intelligence Interlink Corporation
Denis White, Harvard Laboratory for Computer Graphics and Spatial Analysis
John Williams, Managing Principal-in-Charge, Dames & Moore
Charles Wilson, Head of Earth Resources Data Center, Environmental Research Institute of Michigan
Paul Wilson, Planning Consultant, Association of Bay Area Governments