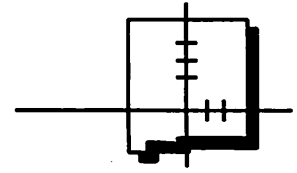


The MAP LEGEND

New Mexico Geographic Information Council



Volume 3

Number 3

Spring 1992

ATLAS WILL OFFER DETAILS OF ROCKY MOUNTAIN NATURAL GAS RESOURCES

An atlas of major Rocky Mountain gas reservoirs to be produced by the New Mexico Bureau of Mines and Mineral Resources will provide information to allow the efficient exploration and production of natural gas in the region.

The atlas, produced under an agreement with the Gas Research Institute (GRI), will characterize and analyze the deliverability of natural gas reservoirs in New Mexico, Colorado, Wyoming, and Utah from both geologic and engineering points of view. Standard methods used to assess the profitability of development drilling and completion practices will also be presented and applied through a series of examples.

In 1990 New Mexico ranked fourth among gas-producing states and currently ranks third in terms of proved reserves. Of the four-state region covered in the atlas, New Mexico holds more than 53% of proved gas reserves, followed by Wyoming with 32%, Colorado with 11%, and Utah with 4%. The atlas will characterize an estimated 850 gas reservoirs within the four states. Reservoirs will be grouped into "plays" based on geologic, engineering, and production characteristics. By providing this geologic, engineering and economic framework, the atlas will encourage natural gas producers to improve develop-

ment of known reservoirs and explore for new ones.

The *Atlas of Major Rocky Mountain Gas Reservoirs* will be compiled by a consortium of four western states' geological surveys, ECL-Bergeson Petroleum Technologies, Inc., Methane Resources Group, Ltd., and the Bureau of Economic Geology at the University of Texas at Austin. The NMBMMR, the Colorado Geological Survey, the Wyoming Geological Survey, and the Utah Geological Survey will co-fund the GRI project. NMBMMR, the prime contractor to GRI, will lead the consortium.

GRI is a non-profit research and development organization that works on behalf of the natural gas industry and its customers. For additional information, contact Dr. James M. Robertson, NMBMMR at (505) 835-5420.

NMGIC MEETING VIDEOS AVAILABLE

The semi-annual meetings of the New Mexico Geographic Information Council, Inc. are being videotaped, so if you are unfortunate enough to miss a meeting, you can still see the program via video. Tapes may be checked out to members of NMGIC for two weeks from the Technology Application Center in Albuquerque. They are free except for postage. Popcorn is not provided!

From the President

Tom Henderson

On February 7, 1992, Executive Board member Dan Sutcliffe and NMGIC member Ted Talmon audited the NMGIC accounts as kept by Treasurer Amy Budge. This was pursuant to an Executive Board resolution of November 15, 1991, and will become an annual practice. I would like to quote from the report given to me as a result of that audit:

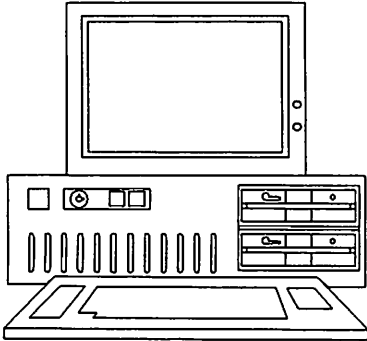
"We found the accounts to be balanced and accurate and the procedures very defined. We would like to compliment Amy on her record keeping and especially point out the fact that she maintains a duplicate system of records for backup. Her foresight in this regard is greatly appreciated."

I will add my sincere appreciation for what is an essential organizational responsibility that is generally taken for granted by those not involved with it. Another job very well done Amy!

The upcoming Spring Meeting promises to be another good one. One of the pioneers in Geographic Information Systems, and certainly one of the most successful entrepreneurs in that field, will be the featured speaker. Mr. Jack Dangermond, President and founder of Environmental Systems Research Institute

(continued on page 3)

The Map Legend



Editor: Heather Rex
Assembly: Amy Budge
Mailing: Dave Love
Desktop Publishing:
Jeanette Albany

The Map Legend is published quarterly by the New Mexico Geographic Information Council and is a benefit of membership in NMGIC. The opinions expressed are those of the contributors and do not necessarily represent the views of the New Mexico Geographic Information Council, except where specifically noted. The mention of trade names or products does not constitute an endorsement of the NMGIC. Members are invited to send articles and announcements of interest to the editor by the following deadlines: September 1, December 1, March 1, June 1. Please direct all correspondence to:

Heather Rex
 MAGIC/Centennial Library
 University of New Mexico
 Albuquerque, NM 87131-1466

CORPORATE PROFILES

The companies listed below contribute their corporate support to the New Mexico Geographic Information Council, Inc. NMGIC is grateful for their sponsorship and presents the following profiles so that the readership of The Map Legend may know more about these important people.

Analytical Surveys, Inc.
 1935 Jamboree Drive
 Colorado Springs, Colorado 80920
 (719) 593-0093

Analytical Surveys, Inc., (ASI) is a leading provider of digital landbase mapping and map conversion services for Geographic Information Systems (GIS). By incorporating a variety of highly technical processes, the company captures new and existing geographic information and converts it to a computerized format for use in Geographic Information Systems.

Since its inception ten years ago, ASI has earned a reputation as a pioneer in developing innovative technological advances and improving productivity. ASI has set industry standards for precision and accuracy. Its clients include cities, counties, utility companies, and others making use of the emerging technologies related to digital mapping. ASI currently serves the GIS community in three primary areas:

- ▶ Digital topographic, planimetric, and orthophoto mapping services.
- ▶ Comprehensive GIS database design and development services.
- ▶ Automated scanning and map/data conversion services.

(Corporate Profiles continued on page 4)

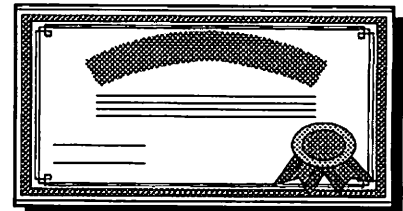
A SPECIAL THANKS . . .

NMGIC extends its appreciation to the following 1992 corporate members for their support:

ComRim Systems, Inc.
 1850 Old Pecos Trail
 Suite J
 Santa Fe, NM 87501

IBM
 125 Lincoln Avenue
 Suite 300
 Santa Fe, NM 87501

ERDAS, Inc.
 4000 Blue Oaks Drive
 Suite 200
 Gilroy, CA 95020



ALLIANCE FOR GEOGRAPHIC EDUCATION IN NEW MEXICO

Karl Wursching has been extremely busy the past few months in pursuing his efforts toward promoting the Alliance for Geographic Education in New Mexico, the National Geographic Society's program to upgrade geographic knowledge and education in the states. NMGIC supports this program and several individual members appeared in Santa Fe with Dr. Wursching to meet with legislators in January.

The Alliance bills (House 120 and Senate 64) finally wound up as a line item for NMSU-A in House Bill 2. It passed both House and Senate and is now on the governor's desk. Governor King and his staff have been very supportive of the Alliance, so we hope all is well. By the way, the Alliance for Geographic Education in New Mexico has a motto, according to Karl: "Geography is contagious—Let's have an epidemic!"

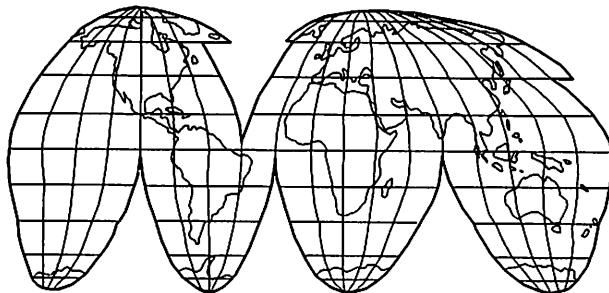
Note: At press time, word came that Governor King signed the bill to appropriate \$50,000 to support the Alliance in the first year.

From the President

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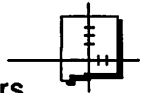
(ESRI), will highlight a meeting devoted to looking down the road to the future of GIS. Mr. Dangermond's foresight has guided ESRI over the past twenty years to a leadership role among GIS software developers. His views as to where the technology is headed should not be missed by anyone currently involved in or contemplating becoming involved in GIS. He is an internationally respected professional and we are very pleased to host his visit to New Mexico.

The second portion of the Spring program will feature a panel of computer hardware experts discussing the trends in computer chips, processors, and imaging systems that will support the next generations of GIS software. The changes ahead will be even greater and will come even faster than what we have already seen. Again, this will be information from the people who should know and should not be missed. Be there!



NMGIC

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Telephone: 471-2170

Geographic Names Committee

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Albuquerque, NM 87123
Telephone: 298-8420

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NM State Highway Department
P. O. Box 1149, Room B-31C
Santa Fe, NM 87504-1149
Telephone: 827-3214

CORPORATE PROFILES

(continued from page 2)

Environmental Systems Research Institute, Inc.
1426 Pearl Street, Suite 210
Boulder, Colorado 80302
(303) 449-7779

Founded in 1969 as a research group devoted to improving methods of handling geographic data, Environmental Systems Research Institute, Inc. (ESRI) has since become a leading vendor of geographic information system (GIS) software, with clients located worldwide. ESRI also offers education, consulting, and data automation services related to geographic information management. In addition to headquarters in Redlands, California, ESRI has nine domestic regional offices, eight international offices, 95+ domestic PC software distributors, and approximately 50 international software distributors.

ESRI's flagship product is the ARC/INFO GIS software, which was first introduced in 1982. Simply put, the ARC/INFO GIS integrates geographic information with a relational database management system to allow for the capture, management, analysis, and display of geographic data. ARC/INFO is used by thousands of organizations worldwide for environmental analysis, automated mapping/facilities management (AM/FM), urban and regional planning, resource management, health information services, publication quality digital map production, transportation analysis, market research and planning, education and research, and many other applications. In addition to ARC/INFO, ESRI also offers the ArcView and ArcCAD GIS software products.

Koogle & Pouls Engineering, Inc.
8338A Comanche NE
Albuquerque, New Mexico 87110
(505) 294-5051

Since its founding in 1964, Koogle & Pouls Engineering, Inc., has obtained extensive experience in geodetic surveys; site surveys; utility surveys; black and white, color, and color infrared aerial photography; reprographics; analytic aerotriangulation; ortho-photo preparation; photogrammetric mapping; and geographic and attribute data base construction. Successfully completed projects cover a wide geographic area—from Washington State, through California, to the City of Chihuahua, Republic of Mexico, thence to Arkansas and Wisconsin. Their staff includes professional engineers, professional surveyors, and certified photogrammetrists whose many years of experience include projects located from the Alaskan North Slope to the Republic of Zaire. The experience of senior staff members covers from 20 to 40 years of diverse assignments covering the entire spectrum of photogrammetric engineering and allied control surveys. Since its founding, Koogle & Pouls has utilized a Total Quality Management approach to projects, where every staff member accepts the responsibility, within the framework of an overall program, for the accuracy of their work. Our clients receive support from experienced

personnel, knowledgeable in the utilization of the advanced instrumentation available to them. Key personnel work closely with clients to ensure that they benefit from the reservoir of available photogrammetric/ surveying experience and to ensure that each project is planned in the most cost effective manner to obtain the data and accuracies they require for present and future needs.

Koogle & Pouls has maintained an investment in technology, resulting in a complete surveying and photogrammetric capability including three Ashtech ME-XII Global Positioning Receivers; Geodimeter 440 "Total Station" with Geodat 126, Automatic Data Recorder; Supercharged Cessna 206 aircraft; Zeiss RMKA 15/23 camera with closed circuit TV navigation monitors; Automated film processor; LogEtronic printer; Borrowdale process camera; Customized HE12 rectifying enlarger; Kern DSR 11 Analytical Stereoplotters; Intergraph 6040 Interpro Workstations, and Precision Image 636 Color Electrostatic plotter.

New Mexico Technet, Inc.
4100 Osuna NE, Suite 103
Albuquerque, New Mexico 87109

New Mexico Technet's mission is to promote economic growth within New Mexico by enhancing the State's scientific and educational resources through the development and operation of a data communications network that provides for the timely transfer of information among the Federal Research Laboratories, Educational Institutions, State Government, and the Private Sector. New Mexico Technet's objectives are:

- ▶ The support of specialized information needs in the State including technology transfer.
- ▶ Facilitate joint research projects between facilities in the State.
- ▶ To serve the needs of educational institutions by providing enhanced communication systems and access to information.
- ▶ Continuing to seek and explore avenues to improve and enhance communications.
- ▶ Improvement in the efficiency of delivery of public services to enhance economic climate.

Silicon Graphics, Inc.
6501 Americas Parkway NE
Albuquerque, New Mexico 87110
(505) 884-1400

Silicon Graphics, Inc., is the leading manufacturer of visual computing systems. The company delivers three-dimensional graphics, color, audio, video, and real-time motion technologies to the technical, scientific, and creative computing marketplace. Founded in 1982, Silicon Graphics, Inc., has offices worldwide and is headquartered in Mountain View, California.

(continued on page 6)

NMGIC Sponsors GIS Session at Annual Convention

NMGIC sponsored a GIS session at the 1992 ASPRS/ACSM Annual Meeting and Convention in Albuquerque on Wednesday morning March 4. The session was designed to illustrate to a national audience the uses and applications of GIS in New Mexico. Demonstrations and posters were presented by NMGIC members from the following agencies/offices: Division of Government Research (UNM); Technology Application Center (UNM); City of Albuquerque, AGIS; New Mexico State Highway and Transportation Department; General Services Department/Information Systems Division; RGIS Program; McKinley County Rural Addressing; Geographic Names Information System Program; Bureau of Land Management; and USGS-Water Resources Division. NMGIC also had an information table set up with a table-top display, brochures, and abstracts on each presentation. The session began at 8:00 am and continued until noon. Responses from our participants indicated that attendees were very interested in the various applications on display and that the time spent in hosting this event was well worth the effort.

The 1992 ASPRS/ACSM Annual Convention drew 2515 registrants and featured over 100 exhibits of surveying, mapping, and remote sensing technologies. In addition to the exhibits, workshops and tutorials were offered, as well as the traditional technical sessions. Both societies installed new officers during this meeting. The new president of ASPRS is Dr. Stanley

(continued on page 6)

NMGIC Sponsors GIS Session at Annual Convention

(continued from page 5)

Morain. Dr. Morain is Director of the Technology Application Center and Chairman of the Geography Department at UNM. He has been an active member, serving on many ASPRS committees, since 1965. ACSM's new president is Robert Foster, a Registered Professional Surveyor and a Registered Professional Engineer. He is Director of Operations of Cullinan Engineering Co, Inc., Auburn, Boston and Princeton, Massachusetts. He has been a fellow of ACSM since 1988 and a member of ACSM since 1978.

Agenda for NMGIC Spring Meeting

April 17, 1992

UNM Continuing Education
1634 University Blvd NE

8:00 am: Registration, coffee and danish in exhibits area

9:00 am: Business meeting, committee reports, introduction of USGS Field Office manager by Lee Aggers

10:00 am: Keynote address by Jack Dangermond, ESRI

11:00 am: Lunch break (box lunches available for those who reserved them)

1:30 pm: Panel discussion, "Future Directions in Hardware"

2:30 pm: Committee meetings

If your 1992 dues are paid, bring your membership card to gain entrance to the meeting. Non-members will be charged \$15.00 at the door.

CORPORATE PROFILES

(continued from page 5)

Silicon Graphics integrates a highly optimized and robust version of the X Window System with true, high performance 3D graphics. Together, X and the SGI IRIS Graphics Language (GL) allow users to perform dynamic remote and local visualization in standards-based, distributed environments.

The Geometry Partner Program supported by SGI encourages third party software developers to take advantage of the advanced visualization technology, resulting in over 1600 software packages currently supported on the SGI platform. GIS related applications range from resource extraction, environmental compliance, image processing, transportation planning and design, and mission planning, to virtual reality and real time simulation. The support of a single version of the Graphics Library across all platforms allows users to easily upgrade to add new features or improve performance through multi-processing without software changes.

Sun Microsystems, Inc.

1700 Louisiana Boulevard NE, Suite 300
Albuquerque, New Mexico 87110
(505) 268-3350

Sun Microsystems, Inc., is one of the world's leading suppliers of client-server computing solutions that feature networked workstations and servers that store, process, and distribute information. These systems are used for many demanding commercial and technical applications. According to analysts, Sun's products command the largest share of the computer industry's fastest growing market segment: workstations and servers. The company was founded in 1982 and is headquartered in Mountain View, California. The Sun Microsystems, Inc., family is comprised of several operating companies, including Sun Microsystems Computer Corporation, SunExpress, Sun Microsystems Laboratories, SunSoft, and Sun Technology Enterprises.

Digital Equipment Corporation and Geographic Information Systems

7770 Jefferson Street NE, Suite 100
Albuquerque, New Mexico 87103
(505) 857-7000

Digital Equipment Corporation is the world's leading supplier of networked computer systems, software, and services, and is a leader in systems integration. An international company, Digital develops and manufactures products and provides customer services worldwide.

Digital works closely with geographic information system software vendors to bring customers applications including automated mapping/ facilities management (AM/FM), geographic information systems (GIS), digital terrain modeling, remote sensing, and map/image scanning. What sets Digital apart from other vendors is the way we build these applications into a

solutions architecture and integrate the applications with other information systems throughout an organization.

Digital is building an integrated, distributed computing environment around open systems that are compatible from the desktop to the data center.

Digital's capabilities in networking and communications and our skills integrating other vendors' systems into a computer network allow customers to realize an integrated geographic information system.



Calendar

April 19-22, 1992. **Association of American Geographers Annual Meeting.** San Diego, California. Contact: Elizabeth Betschen, AAG Office, 1710 16th Street NW, Washington, DC 20009-3198.

April 27-30, 1992. **AM/FM International Conference XV.** San Antonio, Texas. Contact: AM/FM International, 14456 E. Evans Avenue, Aurora, CO 80014; (303) 337-0513; Fax: (303) 337-1001.

June 1-6, 1992. **International GPS/GIS Conference.** Newport Beach, California. Contact: GPS/GIS '92 Conference Manager, % GeoResearch, Inc., 115 North Broadway, Billings, MT 59101; (602) 248-6771; Fax: (406) 248-6770.

June 2-5, 1992. **Short Course: Global Positioning Systems—Principles and Applications.** University of California, Irvine. Contact: Dr. H. Barsamian, Program Director, University of California—Irvine, P. O. Box 6050, Irvine, CA 92716-6050; Fax: (714) 725-2090.

June 15-17, 1992. **First Thematic Conference: Remote Sensing for Marine and Coastal Environments.** New Orleans, Louisiana. Contact: ERIM/Marine Environment Conference, Nancy J. Wallman, P. O. Box 134001, Ann Arbor, MI 48113-4001; (313) 994-1200 ext. 3234; Fax: (313) 994-5123.

August 2-8, 1992. **ASPRS/ACSM Technical Meeting and Exposition.** Washington, DC. Contact: Registration Coordinator, ASPRS/ACSM, 5410 Grosvenor Lane, Suite 100, Bethesda, MD 20814-2122; (301) 493-0200.

August 2-14, 1992. **XVII ISPRS Congress.** Washington, DC. Contact: XVII Congress, % Galaxy Registration, P. O. Box 4088, Frederick, MD 21701.

September 23-25, 1992. **Southwest ARC/INFO User Group Conference.** Santa Fe, New Mexico. Contact: Ted Talmon, GSD/ISD, P. O. Drawer 26110, Santa Fe, NM 87502; (505) 827-2047; Fax: (505) 827-9811.

October 14-15, 1992. **GIS in the Rockies.** Golden, Colorado. Contact: GIS in the Rockies, P. O. Box 150020, Lakewood, CO 80215.

November 10-12, 1992. **GIS/LIS '92 Annual Conference and Exposition.** San Jose, California. Contact: GIS/LIS '92, 5410 Grosvenor Lane, Suite 100, Bethesda, MD 20814-2122; (301) 493-0200; Fax: (301) 493-8245.

Please use this page to send any announcements, articles, or any information that you would like to convey to **THE MAP LEGEND**.

A large, empty rectangular box with a black border, intended for submitting announcements, articles, or other information. The box is currently blank.

Send to Heather Rex
MAGIC, Centennial Library
University of New Mexico
Albuquerque, NM 87131

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