

NEW STAFF

On February 1, 1988, Mr. Robert F. Gurda started employment in the State Cartographer's Office, as Ms. Christine Reinhard's replacement. For the months of February and March, Bob was dividing his time between the Office and his previous position in the Department of Landscape Architecture at UW-Madison, where he worked with the CONSOIL project. In April he became full-time in his new position.

Bob has a Masters degree in Cartography from the UW-Madison, with emphasis on digital cartography, graphic design and land information systems. While a graduate student, he was a Teaching Assistant in physical geography, a Project Assistant helping develop the groundwork for the Wisconsin Land Records Committee, and a Research Assistant for a National Charting Standards project. His Bachelors degree is also from UW-Madison in Zoology with emphasis in ecology and the environmental sciences. He has broad experience in land records and cartographic automation.

Bob is a lifelong resident of Wisconsin and knows the state well. He has worked as a seasonal Park/Forest Naturalist for both the DNR and the National Park Service. Over the next 12-18 months, it is the office's intention to have Bob visit most of the regional planning, county, and municipal offices of the state. He can be reached at 608/262-6850, Room 143 Science Hall, Madison, WI 53706-1404.

BULLETIN GOING ... DESKTOP

You will notice a variety of formats in this issue of the Bulletin. This is because the Office is in the midst of converting to desktop publishing. With the receipt of Ventura Publisher software in mid-March, the Office has all the components complementing existing equipment to begin con-This includes a Hewlett-Packard Series version. II laser printer, the font cartridge and the "mouse". Our initial effort was to develop this capability on the secretary's (Brenda) micro-computer system. With the expert help of Bob Gurda (new Outreach Program Manager in the Office), Brenda has the publishing system operat-ing in minimal format. We are using standard page layouts (defaults) and are somewhat restricted at this time with style sheets and page size. We intend, however, to develop our own style sheets, acquire additional type fonts and as the year progresses, improve the readability and appearance of the Bulletin. We anticipate significant changes in our next several issues.

SORRY WE'RE LATE!

Several offices' here in Science Hall were recently robbed, including ours. The robber(s) must have been desperate because they took the paper tray to our laser printer. We just received a new paper tray and we're back to work.



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U.S. GEOLOGICAL SURVEY NEWS

NEW USGS TASK FORCE FORMED TO MERGE DATA STANDARDS ACTIVITIES

A Digital Cartographic Data Standards Task Force has been formed at the request of Lowell Starr, Chief of the U.S. Geological Survey National Mapping Division as part of an ongoing effort to fulfill lead agency requirements assigned to the USGS for promulgation of Federal standards in the earth sciences. The goal of the task force is to meld the current standards development activities of the National Committee for Digital Cartographic Data Standards (NCDCDS) and the Standards Working Group of the Federal Interagency Coordinating Committee on Digital Cartography (SWG/FICCDC) to produce a digital cartographic data standard.

The task force is composed of 15 members (8 voting and 7 advisory) selected for their recognized expertise and their outstanding contributions to the standards development effort. The members are:

(voting members)

- Joel Morrison, U.S. Geological Survey (chairman) (formerly Prof. of Geography, UW-Madison),
- Fred Billingsley, National Aeronautics and Space Administrtion, Jet Propulsion Laboratory,
- Robin Fegeas, U.S. Geological Survey
- Patrick Martin, Federal Emergency Management Agency,
- David Meixler, U.S. Bureau of the Census
- Jan van Roessel, EROS Data Center
- Patrick Satterfield, Defense Mapping Agency
- Walter Winn, National Oceanic and Atmospheric Administration

(advisory members)

Alfred Brooks, Information Interchange Nicholas Chrisman, University of Washington Harold Moellering, Ohio State University Timothy Nyerges, University of Washington Robert Rugg, Virginia Commonwealth University Gale TeSelle, Soil Conservation Service James Upperman, National Bureau of Standards

Comments on either the current standard or the activities of the task force itself, will be welcomed at any time. All correspondence should be directed to: Joel Morrison, Chairman, Digital Cartographic Data Standards Task Force, U.S. Geological Survey, 519 National Center, Reston, VA 22092.

DO YOU WANT TO COMMENT ON USGS APPLICATION ON NAD 83 TO 7.5' TOPOGRAPHIC QUADS?

The U.S. Geological Survey has printed a two sided version of a 7.5' topo quad. This quad is identified as:

EXPERIMENTAL EDITION OF THE SAN RAFAEL, CA QUADRANGLE ON NORTH AMERICAN DATUM 1983 (NAD 83) AND NORTH AMERICAN DATUM 1927 (NAD 27) MAP 37122-H5-TF-024

The printing also contains a one page questionnaire to be returned to USGS. Copies of this map can be obtained by writing: Chief, National Mapping Division, U.S. Geological Survey, 510 National Center Reston, VA 22092.

The following quotation explains, in part, the USGS position:

"The USGS is faced with the problem of converting nearly 55,000 of its primary series maps to new NAD 83. Conversion to earth-centered NAD 83 reference systems will be of increased importance as use is made of the Global Positioning System (GPS) and other satellite-derived data that are referenced to the center of mass of the Earth. Conversion to NAD 83 will also remove known existing anomalies in the horizontal control network. The USGS has evaluated many options ranging from continuing preparation of its products on NAD 27, to recompiling the maps on Complete recompilation of the mapped NAD 83. detail on NAD 83 was determined to be impractical considering the timeframe and funds that would be required to completely remap the Therefore, a cartographic solution, holdcountry. ing the existing map detail limits, was determined to be the most feasible approach. This San Rafael sheet illustrates this type of conversion."

MORE U.S.G.S NEWS

"The San Rafael map was positioned on NAD 83 by recasting the latitude/longitude projection, UTM grid, and the State Plane Coordinate System ticks on NAD 83, scaled to fit the current sheet corners. This results in map corners that are not on standard 7.5-minute divisions of a degree. The map is printed twice to show the area positioned on NAD 83 on one side of the sheet and the existing map originally produced on NAD 27 on the reverse side. This will enable users to graphically compare the differences between NAD 27 and NAD 83 and, for an interim period, enable users to continue to reference map detail on either NAD 27 or the new NAD 83." In other words, the two maps show the same area on the ground, but have slightly different reference coordinates.

(source: <u>U.S. Geological Survey, National Mapping</u> <u>Division</u>)

STATUS OF PRIMARY MAPPING SERIES FOR THE 50 STATES

The State Cartographer's Office recently received the 1986 Yearbook of the U.S. Geological Survey, which contained a graphic of the status of primary mapping coverage (1:24,000-scale for all but Alaska) by the Survey. We thought our readers would be interested in expected completion dates for other states since Wisconsin completed coverage in 1985. The unshaded states had complete coverage in 1986 or prior years.



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WISCONSIN LAND INFORMATION ASSOC. NEWS

REPORT ON WISCONSIN LAND INFORMATION ASSOCIATION CONFERENCE IN OSHKOSH, FEBRUARY 1988

The Education Committee of the WLIA, chaired by William Nantell, of Donahue Intelligraphics, Inc. was responsible for organizing the "Wisconsin Land Records Modernization, Focus on Implementation" conference. The State Cartographer is a member of this committee.

The results of the conference exceeded expectations. Initial "breakeven" attendance was established at 100 and top expectation was 150. In fact, 219 attended the conference. Of interest, below is a partial breakout of attendees:

Surveyors	13
Register of Deeds	18
Vendors	23
State Agencies	15
Utility	.6
Real Property Listers	.9
Education	15
Municipalities	38
Planners	18
Assessors	.5
URISA	.7
Federal	.4

Even when advertised as a "Wisconsin" conference there was an outstate attendance of 23 including Colorado (2), Illinois (3), Indiana (1), Michigan (2), Minnesota (14), Missouri (1).

Along with the above attendance, the committee was also encouraged by the sponsorship support which exhibited a wide range of organizations:

American Congress on Surveying and Mapping (Southern Lake Michigan Section) American Society of Photogrammetry and Remote Sensing (Western Great Lakes Region) Automated Mapping/Facilities Management International (Wisconsin Regional Chapter)

State Cartographer's Office

Urban and Regional Information Systems Association (Wisconsin Chapter) Wisconsin Register of Deeds Association Wisconsin Association of Assessing Officers Wisconsin Society of Land Surveyors Wisconsin Real Property Listers Association Wisconsin County Planning Directors Association Wisconsin County Surveyors Association Wisconsin County Code Administration

The committee decided not to sponsor a vendor display area. However, vendor attendance was high and several information rooms were established.

The State Cartographer's Office is now transcribing the 5 recorded presentations and will make these proceedings available "upon request" after July 1, 1988.



WISCONSIN LAND INFORMATION ASSOCIATION MEETING IN MILWAUKEE

The Wisconsin Land Information Association (WLIA) met together with the Wisconsin chapter of URISA at 3:00 p.m. on May 10, 1988 in Room 301A, of the City Hall, Milwaukee, Wisconsin. On the agenda were reports on the 1988/89 elections for the WLIA. Elected for 1988 were Al Miller, President; Ben Niemann Jr. President-Elect. The Board of Direction appointed Art Ziegler as Secretary and Tom Patterson as Also the Legislative Committee Treasurer. chaired by Jane Licht reported on State Representative Loftus' Stewardship 2000 initiative and other land records and Legislative contacts. Finally the Education Committee chaired by Bill Nantell, of Donahue Intelligraphics, reported on the 1988 Oshkosh Conference, and made recommendations for the 1989 Conference. The next WLIA meeting is scheduled for July 26 in Madison.

CONFERENCES I ECHNICAL MEETINGS | WISCONSIN SURVEYOR LAROCK

URISA CONFERENCE

The Urban and Regional Information Systems Association (URISA) annual conference will be August 7-11, 1988 in Los Angeles. The theme, "Mapping the Future," will focus on automated information systems in planning and management of local government and utility operations. Contact Tom Palmerlee, URISA, 319 C Street SE, Washington, DC 20003, or call 202/543-7141.

ACSM/ASPRS Fall Technical Meeting, Virginia Beach, VA

September 12-16, 1988. Convention Center: The Pavilion and the Sheraton (Lead hotels). Contact: L. David Little, P.W. Surveying and Mapping, 385 Operations Bldg., Municipal Ctr., Virginia Beach, VA 23456, 804/427-4844,

Twenty-Second International Symposium on Remote Sensing of Environment

October 20-26, 1988; Hotel Ivoir, Abidjan, Cote d'Iviore. For additional information contact: Alan K. Parker at 313/994-1200, or Dorothy Humphrey, ext. 2290.

GIS/LIS '88

November 29 - December 3, 1988; San Antonio Marriott Rivercenter Hotel. Organized by: American Congress on Surveying and Mapping; American Society for Photogrammetry and Remote Sensing; Association of American Geographers; Urban and Regional Information Systems For more information contact the Association. GIS/LIS '88 Conference Coordinator at 703/241-2446. (complete conference information will be in the July Bulletin),

RECOVERS STOLEN LEVEL

John LaRock's adroit handling of a situation not only gained the recovery of a stolen level, but enabled police to catch the thief. A Wisconsin Society of Land Surveyors member from Milwaukee. LaRock received a call from a man who wondered if he might be interested in buying a Lietz B2C level for the unrealistically low price of LaRock became suspicious immediately. \$200. The seller claimed he had used the level in his landscape business for running boundary lines.

LaRock said he was interested in purchasing the level, but asked for the serial number to verify the equipment's age. The caller accommodated the request and LaRock said he would be there in an hour to look at the level. LaRock quickly called a contact at Scientific Instruments to check the serial number to determine if the level had been stolen. Scientific Instruments verified that it was.

LaRock went to look at the level and told the seller that he would return with \$175 the next day. He immediately contacted the police. The police set up a sting. LaRock called the man to say his "brother-in-law and wife" were coming with the cash to pick up the level. Two detectives went to the party's house, made the purchase and then the arrest.

In recognition of his efforts, the Milwaukee Police Department presented LaRock with a special award.

(source: <u>ACSM_Bulletin</u>, April 1988)





STATE ENGINEER WINS NATIONAL AWARD

The Wisconsin Department of Transportation's design engineer has won national recognition for developing and implementing technological advances in highway engineering that are saving the state time and money.

Tom Carlsen, 42, Middleton, was awarded the 1987 Alfred E. Johnson Achievement Award at the annual meeting of the American Association of State Highway and Transportation Officials held recently in San Diego, CA.

Carlsen is the first Wisconsin resident to receive the award, which is presented for outstanding contributions to the field of highway engineering.

Carlsen's leadership in developing and implementing numerous technological advances in computer aided design and drafting, automated surveying photogrammetric engineering, geometric data collection and analysis, and image processing were cited by Lee Crook, his supervisor and director of the WisDOT Bureau of Engineering Development.

"Tom's efforts led to the first state highway map in the nation to be produce from a computer base," Crook noted. "This saved the state dollars, improved quality, and provided a readily available computerized map base which offers numerous cost-effective spin-off uses".

"His efforts will also lead to the first county map series generated from scan-digitized quadrangle maps."

Carlsen first joined WisDOT as a student engineer in training in 1964. After receiving his degree in civil engineering from the University of Wisconsin in 1968, he joined WisDOT as a traffic operations engineer. He headed the traffic engineering safety unit from 1974 to 1981, when he was named manager of technical services. He was appointed design engineer last October.

While manager of the Technical Services Office of DOT, Tom Carlsen was a member of the Committee on State Cartography, the oversight and direction body for the State Cartographer's Office. With his promotion to design engineer he relinquished membership to John Haverberg, State Technical Services Engineer for Highways.

(source: <u>Wisconsin Counties</u>, March 1988)

30 DAY TIME LIMIT SET ON CENSUS MAPS

As part of the on-going effort to make the 1990 federal census the most accurate ever conducted, municipal officials are obligated to correct a computer drawn map showing the latest legal limits of the governmental jurisdiction according to the federal Census Records.

After receiving the map, local government officials have 30 days to update (if necessary) the boundaries as of Jan. 1, 1988, and certify that the boundaries are correct. In a note to the League office, the chief of the Census Bureau's Geography Division stressed that local officials should study the maps carefully even if their jurisdiction has not had any boundary changes since the 1980 census. The Census Bureau wants to make sure that it made no errors when the old information was entered into the computer system.

Local government officials can obtain more information about the survey by writing to: Robert W. Marx, Chief, Geography Division, U.S. Bureau of the Census, Washington, D.C. 20203.

(source: The Municipality, April 1988)



WISCONSIN AMONG FIFTEEN STATES CHOSEN FOR ECONOMIC DATA CENTER PROJECT

Fifteen State Data Centers (SDC's) have been chosen to participate in our Business/Industry Data Center (BDIC) Pilot Project. The States submitted proposals spelling out how they would use the program to assist in economic development. The Centers will operate as part of the current SDC program and will receive economic data from the Census Bureau and other Federal agencies for use in furthering economic development within their respective States.

"We had so many solid proposals the choice was agonizing," says John Rowe, Census Bureau project coordinator. The 15 States chosen are Connecticut, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New Mexico, North Carolina, Pennsylvania, Washington, West Virginia, and WIS-CONSIN.

PROGRAM PARALLELS SDC

The program will work much like the current SDC program. In each State, there will be a BIDC lead agency and a set of affiliates. The agencies will probably differ from those now serving in the SDC program. The economic centers will include State departments of commerce or labor, employment security agencies, university bureaus of business research, trade associations, and chambers of commerce.

Contact John Rowe, Data User Services Division (301/763-1580), for more information.

(source: Data User News, March 1988)

CALCOMP GAINS \$2-MILLION CENSUS BUREAU CONTRACT

The U.S. Census Bureau has awarded CalComp Inc. of Anaheim a contract for more than 40 electrostatic plotting systems. CalComp's 5733XP monochrome electrostatic plotters will be installed in 14 Bureau sites, and will be used to produce a variety of maps in support of the 1990 census. The most significant of these maps will be 360,000 "Address Register Area" maps--highly detailed maps used by census takers. Maps with political boundaries and voting districts will also be produced on the CalComp systems, which feature speeds up to two inches per second and resolutions of 200 or 400 dots per inch, as well as an "intelligent" control panel, line enhancement, self-diagnostics.

AUTOMATED CARTOGRAPHIC RESOURCES

During the next three years, automated cartographic resources will become available that will have pronounced effect on local and regional government offices in Wisconsin. The <u>Wisconsin</u> <u>Mapping</u> <u>Bulletin</u> will attempt to summarize these actions and resources. These activities are based on the federal government's development of an automated digital map-graph base at the scale of 1:100,000 for the lower 48 states and Hawaii.

This digital base is the foundation for the following:

- a. the automated map-graphics of the 1990 census, the U.S. Census' TIGER System.
- b. in approximately two years, the Wisconsin Department of Transporation in cooperation with other state agencies will have a Geographic Information System (GIS) base available at 1:100,000-scale.
- c. The Federal Emergency Management Agency (FEMA), producers of flood hazard boundary maps, are testing the accuracy of this mapgraphic base.
- d. other federal agencies are considering use of this base for their outputs.

To keep its readers current, the <u>Bulletin</u> will carry information articles on this automated (100K) map-graphic base. The July issue will summarize FEMA's testing of the map-graphic base.

WISCONSIN MAPPING BULLETIN

Editors: Art Ziegler, Bob Gurda Desktop Publishing: Brenda Hemstead Assembly: Office Production Staff Mailing: Brenda Hemstead, Office Prod. Staff

U.S.G.S. COUNTY MAP SERIES COMPLETE

With receipt of the Columbia County map, the Wisconsin Geological Survey has all 72 county maps for Wisconsin available for sale; 4-color, 1:100,000-scale, folded, with contours in feet. Price \$4.00, plus tax and shipping. Contact Map Sales at (608) 263-7389.

ACSM OFFICERS ANNOUNCED AT CONVENTION

At its 47th annual meeting this March in St. Louis, the American Congress on Surveying and Mapping (ACSM) and its three member organizations held elections. Names to remember: James Clapp, professor and chairman of the Dept. of Civil and Environmental Engineering, and Director of the Center for Land Information Studies at the University of Wisconsin-Madison, elected president, ACSM; James Weidener, of Miami, named president-elect, ACSM; Richard Biggs, of Asheville, NC, elected president, National Society of Professional Surveyors (NSPS); Mary Clawson, of the Office of the Oceanographer of the Navy, named President, American Cartographic Association (ACA); and Edward McKay, chief of Vertical Network Branch, National Geodetic Survey, named president, American Association of Geodetic Surveyors (AAGS).

In other news, ACSM just released a new video film, "The new World of Geographic Information Systems," which features one-on-one interviews with experts in the fields of land and geographic information systems. The tape is available in halfinch VHS format; \$50-members, \$90-non-members. To order, call Sheila McMahon at ACSM, 703/241-2446.

THE "WISCONSIN CONNECTION" AT THE ACSM CONVENTION IN ST. LOUIS

Alberta Auringer Wood, 1987-88 ACSM president, opened the exposition at the 1988 annual convention. Mrs. Wood was an employee at the Arthur H. Robinson Map & Air Photo Library during her husband's graduate work at the UW-Madison.

As previously mentioned, James L. Clapp, professor and chairman of the Department of Civil and Environmental Engineering has been elected ACSM president for 1988-89. Prof. Clapp holds a Ph.D., M.S.C.E., B.S.N.S. and B.S.C.E. from the UW-Madison, and was the chair of the Wisconsin Land Records Committee. A. Jon Kimberling, associate professor and director-cartographic service in the Department of Geography at Oregon State University, has been elected vice president of ACA. Prof. Kimerling has a Ph.D. in Cartography from UW-Madison and has returned to teach at the University on sabbaticals.

Prof. Phillip Muehrcke, UW-Madison Geography, also chair of the Committee on State Cartography, was the outgoing president of ACA.

Winner of the Earle J. Fennell Award, Thomas M. Lillesand. Prof. Lillesand is Director of the Environmental Remote Sensing Center, UW-Madison.

Amongst eleven Presidential Citation recipients were Clifford Wood, Joel Morrison, A. Jon Kimberling, and Alan R. Stevens who received degrees from UW-Madison.

R.R. Donnelly and Sons Company Award winner: The Flight of the Voyager, by David DiBiase and John Krygier, graduate students in cartography at UW-Madison.

COASTAL AND OCEAN MANAGEMENT SYMPOSIUM

Abstracts are being accepted for the Sixth Symposium on Coastal and Ocean Management, July 11-14, 1989, Charleston, SC. Submit abstracts by July 8, 1988, to Orville Magoon, Coastal Zone 89, P.O. Box 279, Middletown, CA 95461. For general information contact Delores Clark, NOAA Office of Constituent Affairs, Rockville, MD 20852 or call 301/443-8031.



ORTHOPHOTOQUADS



Current orthophotoquad production in Wisconsin results from cooperative agreements between the U.S. Geological Survey and the U.S.D.A. Soil Conservation Service for support of modern soil surveys and the 1985 Federal Farm Bill.

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CANADA'S HIGH-TECH MAPPING

In November 1987, the Honorable Gerald Merrithew, Minister of State for Forestry and Mines, and Don McLarty, President of the Canadian Association of Aerial Surveyors, signed a memorandum of understanding (MOU) that establishes a new level of cooperation between government and industry in the field of advanced mapping technologies. The MOU will help to develop new initiatives to improve the industry's opportunities on the domestic and international scenes.

The seven areas of cooperation covered under the MOU are: international contracts, development of Canadian standards, exchange and dissemination of information, research and development, training, human resource interchange, and consultation on government policy and programs.

Although much of the early development work in the application of the computer to topographic mapping was carried out in government, private industry is now very much involved in digital mapping. Canadian industry expects to increase its share of the rapidly-expanding world market for advanced mapping systems from \$250 million to \$1 billion per year within the next five years.

National mapping is the responsibility of the Surveys, Mapping and Remote Sensing Sector of Energy, Mines and Resources Canada. The Canadian surveys, mapping and remote sensing industry uses world class technology, such as global positioning systems and satellite imagery to develop computerized data bases for topographical, geographical and thematic mapping. It is hoped that the memorandum of understanding will lead to economic development, both within the mapping industry and within those resource industries that use mapping technology as a vital tool in their operations.

For more information, contact the Canada Center for Remote Sensing, 2464 Sheffield Rd., Ottawa, ON K1A 0Y7.

(source: Land, April 1988)

GEOVISION AWARDED FLORIDA COUNTY GIS CONTRACT

Orange County and the City of Orlando, FL, have awarded a \$1.9 million contract to GeoVision for a comprehensive geographic information system (GIS). The large integrated system will provide sophisticated mapping and land records capabilities for a planned multi-participant project through which 13 city and county agencies will team up to share costs and resources to build a common digital database. Editor's Note: For comparison, Orange County has 910 square miles, or approximately 25.3 townships and a 1984 estimated population of 530,000.

(source: ACSM Bulletin, April 1988)

AUTOCAD-BASED SOFTWARE RELEASED

DCA Engineering Software announced a new version of CIVILWORKS, DCA's AutoCAD-based surveying and civil engineering software. It consists of five application modules, including Data Input & Reduction, COGO, Design, AutoMAP (DTM), and Volumes. The modules work together as an interactive design and drafting system, within the AutoCAD graphics program.

CIVILWORKS is available in both personal computer and 32-bit Sun Microsystems versions through your authorized DCA dealer. For further information, contact DCA Engineering Software, P.O. Box 955, Henniker, NA 03242; 603/428-3199.

(source: <u>Professional Surveyor</u>, May/June 1988)

NACIS III ANNUAL MEETING

October 12-15, 1988. The North American Cartographic Information Society is holding its Eighth Annual Meeting at the Radisson Hotel in Denver, CO. The theme, "Cartographic Applications: Expanding Frontiers". For information contact: Juan Jose Valdes, NACIS Program Chair, Cartographic Division, National Geographic Society, 1600 M Street, N.W., Washington, DC 20036.

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THE EDITOR WELCOMES NEWS ON COMPLETED OR ONGOING PROJECTS, PUBLISHED MAPS OR REPORTS, CONFERENCES/WORKSHOPS. LOCAL AND REGIONAL INFORMATION IS ESPECIALLY REQUESTED.

PLEASE SEND ALL COMMENTS, CORRECTIONS, AND NEWS ITEMS TO: STATE CARTOGRAPHER'S OFFICE, 155 SCIENCE HALL MADISON, WI 53706-1404, 608/262-3065. ANSWER TO TRIVIA QUESTION:



Barron Island is surveyed on the 5th Principal Meridian, base line in central Arkansas.

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