VOLUME 10 NUMBER 4 OCTOBER 1984 W_Is_{CONSIN} $^{\mathsf{M}}_{\mathsf{A}_{\mathsf{P}_{\mathsf{I}_{\mathsf{N}_{\mathsf{G}}}}}$ BULLETIN Christine Reinhard Editor Art Ziegler State Cartographer STATE CARTOGRAPHER'S OFFICE 144 Science Hall Madison. WI 53706 608/262 - 3065Est. 1973

LAST 7.5' TOPO QUAD TO PRINTER

The Wisconsin Topographic Mapping Committee received word from the U.S. Geological Survey mapping center at Rolla, MO that the reproduction negatives for the <u>last</u> 60 1:24,000-scale topographic quadrangles were shipped on September 30, 1984 to the Printing and Distribution Center at Reston, VA. The letter stated that "This will result in the State having complete coverage in this map series."

It is anticipated that the printing process will take between 3 and 5 months. The Committee estimates that the final topo quad will be received prior to March 1, 1985. Formal recognition of the State's accomplishment is being planned by the Geological Survey. Additional information will appear in the January Bulletin.

NHAP II

In the manner of movie sequels, there will be a National High-Altitude Aerial Photography II program. Beginning in mid-federal fiscal year 1985, the U.S. Geological Survey will again begin the tremendous task of obtaining aerial photography over the entire United States. The film types and scales will be the same: black-and-white at 1:80,000 and color-infrared at 1:58,000 (flying height 40,000 feet). However, there will be two major changes: it will be leaf-on photography; and it will be indexed by state units, not 1:250,000 quadrangles. Rather than stopping right on the state boundary, the index will extend to the edge of the 1:100,000 quad covering the state line.

Starting in April 1985, USGS will fly Kansas, Mississippi, Alabama, and Tennessee. In FY86 coverage will extend over Michigan, WISCONSIN, South Carolina, North Carolina, Arizona, and Nevada.

The original 12 federal agencies are partners in NHAP II also. At current funding levels, Wisconsin can expect aerial photography every 6 years. Eddie Schwertz at USGS-Mid Contintent Mapping Center can provide more information. Contact him at 314/341-0848.

MILWAUKEE COUNTY COASTAL MAPPING

The Wisconsin Department of Administration has agreed to provide local funding under the National Oceanic and Atmospheric Administration's Coastal Management Program for the preparation of large-scale topographic mapping of a part of the Lake Michigan coastal area in Milwaukee County. Milwaukee County and the City of Milwaukee will provide the required matching local funds. This mapping effort is designed to prepare 1 inch equals 100 feet scale, 2-foot contour interval, topographic maps based on the Southeastern Wisconsin Regional Planning Commission-recommended monumented control survey network, which relates the U.S. Public Land Survey system to the State Plane Coordinate System. The mapping will be prepared for two areas totaling one and one-half square miles in extent. One area extends from E. College Avenue on the south to E. Lunham Avenue on the north. The second area extends from E. North Avenue on the south to E. Edgewood Avenue on the north. This effort will result in the recovery, monumentation, and placement on the State Plane Coordinate System of 13 U.S. Public Land Survey section and quarter section corners. SEWRPC is the recipient of the federal grant and is administering the program.

The large-scale topographic mapping will improve coastal management by providing a planning and management tool to enable local, regional, and state units and agencies of government to better determine shoreline erosion and accretion rates; ordinary high-water levels; specific flood and shoreline erosion hazard zones; and the location, design, and construction constraints of shoreline protection structures. In addition, the large-scale topographic maps will assist local, state, and federal agencies of government in regulating and enforcing existing ordinances and laws pertaining to coastal uses, and in carrying out public works engineering efforts.

Upon completion of this mapping effort, large-scale topographic mapping will have been prepared for 47 linear miles of Lake Michigan coastline extending from the Wisconsin-Illinois State line on the south to the northern limits of the City of Milwaukee on the north. This represents about 58 percent of the 81 linear miles of Lake Michigan coastline within the SEWRPC region.

source: SEWRPC Newsletter

GEORGE WASHINGTON WAS A FLAT EARTHER?!

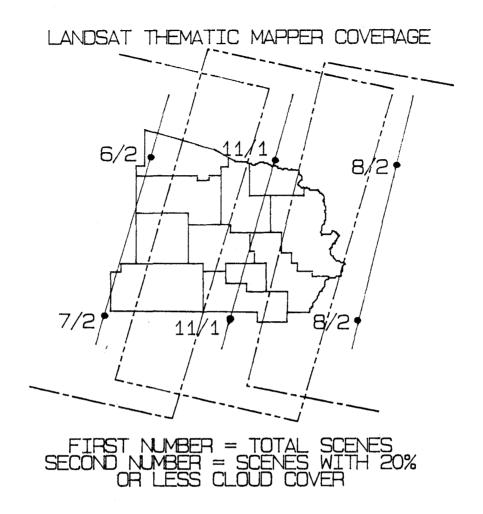
According to Charles K. Johnson of Lancaster, California, the world is flat. The president of the International Flat Earth Research Society believes the earth is a flat disc floating on the primordial waters with the North Pole at its center and Antartica around its circumference. He doesn't believe in gravity. His sun and moon (each 32 miles in diameter) circle among the tiny planets 3000 miles above this flat earth. Heaven is only another 1000 miles above the sun.

Johnson claims many historical noteables as believers, including George Washington, Franklin D. Roosevelt and Joseph Stalin. Washington because, as a young land surveyor, he must have used techniques similar to those used by flat-earth experimenters; Roosevelt and Stalin because they helped found the United Nations, whose emblem Johnson says was lifted from the flat-earth map of the world.

It's ironic that Johnson's ranch is less than 6 miles from Edwards Air Force Base, where the Shuttles landed.

source: Newsweek, 7/4/84

AUTOMATED CARTOGRAPHIC SYSTEM



In the July 1983 <u>Bulletin</u>, Art Ziegler briefly discussed the proposed Automated Cartographic System of the State Cartographer's Office. The ACS is based on the use of a desk-top micro computer, an IBM pc XT. After many unforeseen delays, all components of the system finally came together this late summer and we are gaining experience in producing map type graphics. Shown at the top of this article is one of our first efforts, depicting Landsat 4 Thematic Mapper coverage over northeast Wisconsin. The original was plotted in 5 colors, however for printing we plotted in black only.

It is planned that through the winter months we will iron out the few remaining "bugs" in the system and by early spring be in full production. One of the first planned efforts will be the revised edition of the WINNEBAGO County Cartographic Catalog which is nearly out-of-print. The ACS will eventually greatly increase our catalog production rate.

If you are in the Madison area and would like to view our mirco computer system, feel free to contact us and we can arrange a demonstration. The ACS is located in Room 155 of Science Hall.

A complete description of the total ACS is planned for publication in the January 1985 Bulletin.

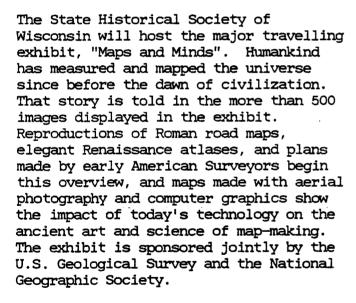
WHEN YOU NEED A MAP

Senator Barry Goldwater, R-Arizona, wanted to put up a set of pull-down maps on the wall of the Intelligence Committee room. But Goldwater, chairman of the committee, was told by the Capitol architect that he could not drill through the sandstone walls there.

Goldwater came in with his home drill, told the guards they could arrest him if they wanted, and drilled the holes himself.

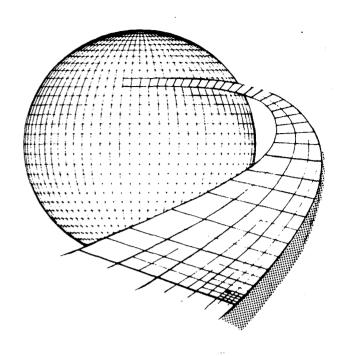
A spokesman for the intelligence panel, Sam Bouchard, confirmed the story. "The map is there," he said. "Sen. Goldwater eliminated a lot of red tape by doing it himself."

source: The Capital Times, 9/25/84



A series of free, informal talks on the history of maps and map-making will be presented on Tuesday afternoons to accompany the exhibit. All talks will be given in the State Historical Society's Sellery Room, across the hall from "Maps and Minds", from 4 to 5 p.m. The schedule of topics and speakers is as follows:

<u>Feb. 19th:</u> "Rewriting the History of Cartography". Prof. David Woodward (Professor, Univ. of Wisconsin Geography



MAP EXHIBIT

Dept., and joint editor of the multivolume <u>History of Cartography</u> now in progress)

Feb. 26th: "Maps and Diplomacy in the American West". Robert Sidney Martin (Lecturer, Univ. of Wisconsin School of Library and Information Studies)

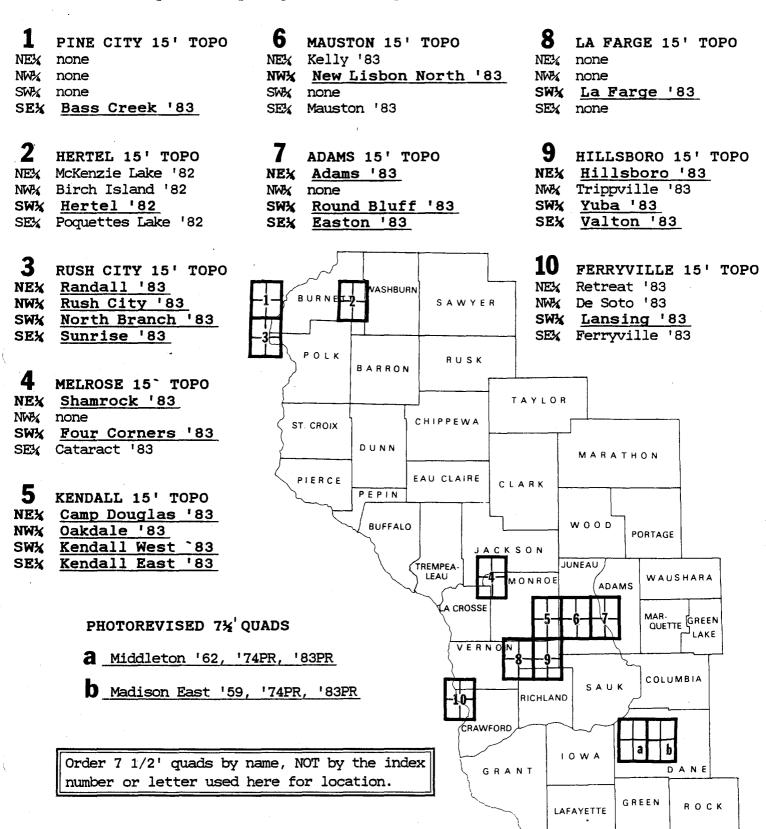
March 5th: "The Napoleonic Mapping of Egypt". Anne Godlewska (Assistant project director of the <u>History of</u> Cartography)

March 12th: "The Exploration and Mapping of the Grand Canyon". Charles Seavey (Lecturer, Univ. of Wisconsin School of Library and Information Studies)

March 19th: "Increase A. Lapham and the Mapping of Wisconsin". Michael Edmonds (Map Curator, State Historical Society of Wisconsin)

NEW U.S. GEOLOGICAL SURVEY PRODUCTION

These newly published (underlined below) 7½' topographic quadrangle maps (1:24,000) are listed by their location on the superseded 15' topographic map of the area. They are available from the Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706, 608/263-7389. Topographic quadrangles are \$2.25 each, plus tax, postage and handling.



BAY-LAKE RPC

During 1984, the Bay-Lake Regional Planning Commission completed its twelfth year of operation. The Bay-Lake RPC was established by Governor Lucey in April 1972 at the request of seven county boards within the region. In December 1973, Florence County joined the Commission bringing the total number of member counties to eight.

The Commission is composed of three representatives from each of the Bay-Lake counties. Some of the Commissioners are locally elected officials, and others are private citizens that are actively involved in community affairs. The Commissioners are appointed by their county boards and the Governor upon the advice of the county boards.

The Commission is authorized by state law to levy a tax up to .003 percent apportioned by equalized real property valuation among the member counties. The Bay-Lake Commission has chosen to utilize only a .001 percent levy for local appropriation.

In 1973, the Commission adopted five operating principles under which all Commission work programs are developed. These principles are:

To assist local government.

To influence state, regional, and federal plans and programs which reflect the best interests of the Bay-Lake region.

To prepare comprehensive plans of the region.

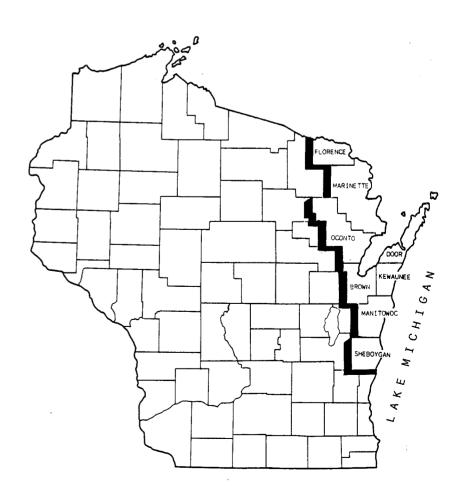
To provide technical information about the region for use by public and private agencies.

To encourage citizen participation in the planning process.

The Bay-Lake Region is comprised of 8 counties, 16 cities, 37 villages, 123 towns, and the Oneida Indian Reservation, for a total of 185 local units of government.

The total area of the region is 5,433 square miles or 9.7 percent of the area of the State of Wisconsin. The region has over 400 miles of coastal shoreline along Lake Michigan and Green Bay, and there are 12 major watershed areas within the region which drain into the waters of Green Bay and Lake Michigan. The 1980 Census shows the region's population to be 476,134 persons or approximately 10 percent of the population of the State of Wisconsin.

source: Bay-Lake RPC 1983 Annual Report





Supervisor Kenneth Johnson, left, and Surveyor Donald Barnes are shown digging out the marker, which will remain buried with a new modern marker placed directly above it. The top of the modern marker will be at ground level for easy reference.

photo source: <u>The Janesville Gazette</u>, 9/11/84

ROCK COUNTY MONUMENT SEARCH

Travelers along Newville Road in the town of Milton on September 10th might have wondered if the Rock County Public Works Department was looking for skeletons or buried treasure in digging a large hole in the center of the road.

Instead of patching asphalt or widening the road as they do routinely, employees were hammering a hole in the road in search of a cut limestone marker set in the 1870s by County Surveyor Edward Ruger.

The quarter corner marker established property lines. Making sure of its exact location is part of a survey program of the towns being conducted by the county surveyor under the direction of the Planning and Development Committee. The idea is to make sure the old survey, done a century ago, is accurate.

A backhoe was used to tear off the asphalt surface of a four-foot section of Newville Road. The marker, slightly damaged due to earlier road construction, was found only about three feet away from the spot calculated by County Surveyor Don Barnes, about a foot and a half under the road's surface.

"It was a few feet off from where we thought it was." Barnes said, leaning on a shovel. "Sometimes measurements

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October 1004

ROCK COUNTY, continued

have been off by as much as 10 or 15 feet."

Planning Committee Chairman Ken Johnson of Beloit helped Barnes dig away some of the clay from around the marker. Johnson said he'll keep a broken section of the marker for a souvenir.

A new marker was set on top of the old one later in the afternoon. When the hole is permanently repaired, the new marker will be visible on the surface of the road.

This excavation was the last done for the town of Milton. Next, the surveyor will review the town of Harmony's survey.

Several roads cover markers in Rock County, Barnes said, because the markers were an easy way to define the right-of-way to early landowners, and the marked areas were conveniently given up as right-of-way.

The excavation and repairing the hole in the road and an earlier excavation will cost the county about \$660, according to Public Works Director Chuck Hubbard.

source: Beloit Daily News, 9/11/84





NATIONAL ARCHIVES

Most aerial mapping photographs of the United States taken for Federal agencies before 1941 have been assembled at the Center for Cartographic and Architectural Archives at the National Archives. These photos date from the mid-1930's and cover approximately 80 percent of the land area of the conterminous 48 States. The Center also maintains collections of American military photographs over the U.S. from the 1940's through 1960's and some recently acquired German military photographs of Eastern Europe and Russia flown during World War II.

The Still Picture Branch of the National Archives has a large collection of photographs taken from the air. These date from the early 20th century to present day. Both the Center for Cartographic and Architectural Archives and the Still Picture Branch maintain Search Rooms in Washington, D.C., where visitors can search the files for the photograph they want. Mail inquiries are accepted but should be very specific in describing area locations and time eras. Be sure your name, address, and telephone number are included in each inquiry. The Archives will search the files and return a research report and a price list for prints. The Still Picture Branch will also send electrostatic copies of appropriate photos. The address for both offices is: National Archives, 8th and Pennsylvania Avenue, N.W., Washington, D.C. 20408, phone 703/756-6700.

source: USGS, NCIC



WISCONSIN STATE JOURNAL photo

MAPPA BOVINA

At 3 p.m. on Monday, October 29, 1984, Professor David Woodward of the Geography Department at UW-Madison painted a map of Wisconsin on a dairy cow. The cow was made available by the UW Dairy Cattle Research Center, Observatory Drive, where the painting took place.

The idea was conceived as an entry in the Geography Club's annual T-shirt contest and was selected as the winning tribution. T-shirts will be made to me photographs of the cow, and can be ordered from the Geography Department,

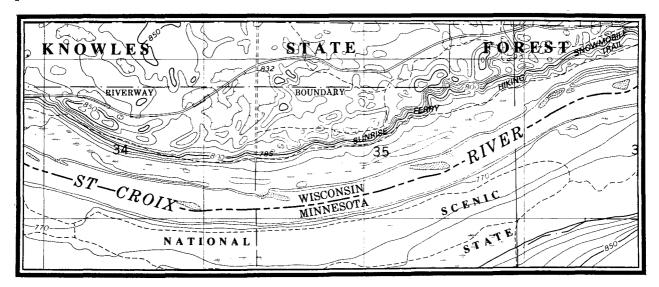
M383 Science Hall, Madison, WI 53706, ATTN: T-Shirt.

Professor David Dickson and the Dairy Cattle Research Center collaborated in the arrangements. Temporary, watersoluble paint was used to prevent injury to the animal.

Professor Woodward is a cartographer and Director of the UW Cartographic Laboratory. He is currently editing a six-volume series on the history of cartography.

MAP CURIOUSITY CORNER

Do you know where Minnesota is SOUTH of Wisconsin?



Polk County. It portrays the bottom of the nose of the Indianhead silhouette area of the state. Answer: On the recently published 7.5' topo quad, Sunrise, in northwestern Wisconsin. The large-scale quad is in

NE WISCONSIN CARTOGRAPHIC CONFERENCE

(see July 1984 <u>Bulletin</u>, page 2)

On October 17, 1984 the State Cartographer held the first of a continuing series of regional cartographic conferences. Art Ziegler went to Antigo, WI where the UW-Extension agent hosted the conference in the county courthouse. The initial invitation was to eleven northeast Wisconsin counties, three state agency district offices and one regional planning office. A total of 16 individuals attended the conference, representing eight counties, one district office and the regional planning office.

The day-long presentation covered a wide range of topics including: current U.S. Geological Survey mapping plans and programs, the Wisconsin "family of maps" proposal, county topographic maps, map products of the Wisconsin Geological Survey, publications of the State Cartographer's Office, the Dane County Land Records Projects and automated mapping using a micro computer. An hour session was devoted to answering questions from the participants.

The State Cartographer's Office considers the first regional briefing a success and is planning four more in an attempt to touch all 72 counties in two years. Comments from readers of the <u>Bulletin</u> are invited regarding this regional conference program.

The State Cartographer's Office wishes to express its appreciation to Langlade County for the use of their facilities and to Joe Jopek, U.W. Extension Resource Agent in Langlade County for his invaluable assistance.

EAU CLAIRE COUNTY REMONUMENTATION PROGRAM

1... Eau Claire County Remonumentation Program has been an attempt to systematically recover and monument the section corners set in the original rectangular survey of what is now Eau Claire County.

The original survey was conducted in the late 1840's to the early 1850's. In years that followed, the positions of many of the original corners were lost due to the actions of nature, time and human settlement.

However, some of the original corners were perpetuated with various types of monuments by interested land owners and private and county surveyors. Sometimes corner restorations were placed on file in the courthouse records, other times knowledge of them was passed along by word of mouth or simply forgotten.

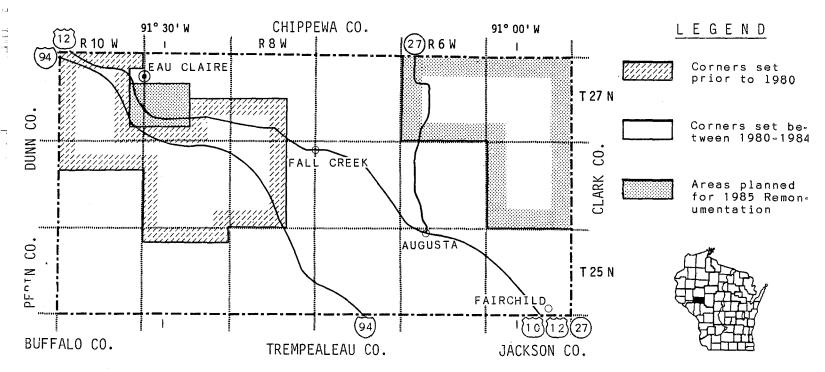
Since 1980 the remonumentation program been operated on a contractual is, where the County has solicited proposals from qualified surveying firms.

In 1982 the County received a competitive bid from four firms operating in the County, headed by Ayres Associations, with Real Land Surveying, Inc., Loken & Associates, and Dittloff, Inc. acting as subcontractors. arrangement worked out particularly well for several reasons. First, firms have a good knowledge of historical surveying and land development in the County. Second, their proximity to the project areas enables them to work more economically and simplifies project administration. Finally, the surveyors now setting these corners will be the ones ultimately working with them, which assures proper care is taken when establishing their positions.

Many pieces of evidence must be gathered and analyzed before a corner can be properly established. Old survey records and deed descriptions, improvements on the land such as fences, tree lines and roads, testimony of residents, and measurements to existing corners are all considered when setting corners.

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EAU CLAIRE COUNTY



EAU CLAIRE, continued

After all the survey measurements have been made, old corners have been searched for, and all the evidence has been considered, determinations are made as to the position of the reestablished corner. An aluminum survey monument is set at the restored or reestablished position and is referenced to bearing trees or witness monuments.

The newly monumented corner positions are tied into a statewide grid called the state plane coordinate system in which mathematical values are calculated for each corner. This enables accurate retracement should the monument be lost or destroyed in the future.

Section summary sheets and monument record documents are then filed in the County Surveyor's office. The section summary sheets show the dimensions of the section and list the witness ties. The monument record sheets document how and why the corner was reestablished.

Once a new monument is set it must be checked periodically to ensure it is not lost or destroyed and that the witness ties are intact. Maintenance should be done on 20% of the corners each year. This way a corner will be visited once every five years and damaged or destroyed monuments and witness ties can be replaced.

Since 1980 Eau Claire County's commitment to this important project has continued to bring them closer to their ultimate goal of restoring 100% of the rectangular survey system corners. If they are able to continue on schedule, monumentation will be completed in 1985, and state plane coordinates will be obtained on corners set prior to 1980 by the end of 1987.

The rectangular land survey system is the foundation of land ownership, accurate assessment and real estate taxation and orderly and logical land development.

source: Michael E. Sutliff, Eau Claire County Surveyor

SEE THE KICKAPOO VALLEY

National Geographic included the scenic Kickapoo Valley in it's new publication Exploring America's Valleys: From the Shenandoah to the Rio Grande. The book contains text and photos from 20 valleys in the United States, Mexico, and Canada. The Kickapoo is the only one from the Midwest. The valley is featured on 20 pages and the book's dust jacket. The special recognition prompted Governor Earl to proclaim August 20, 1984 "Kickapoo Valley Day."

Exploring America's Valleys is available from the National Geographic Society for \$6.95 plus \$2.00 shipping. Their address is P.O. Box 2118, Washington, D.C. 20013.

PLSS BELT BUCKLE

Celebrate the 200th Anniversary of the Public Land Survey System in 1985. The Bureau of Land Management is issuing a special commemorative belt buckle for the bicentennial. It's a numbered edition which will be destroyed after a limited casting. The postmark on your order will determine your priority in their distribution. BLM will begin taking orders November 1st; the cut-off date is November 16th for Christmas delivery. The second run cut-off will be December 14th. Send \$10.00 (includes shipping) for your pewter belt buckle to Jerry Pittman, Bureau of Land Management, U.S. Dept. of the Interior, Mail Stop D-416, Denver Federal Center, Bldg. 50, Denver, CO 80225, phone 303/236-0182.

If you'd really like something special BLM is offering a solid sterling silver buckle for \$120. They will make these up as they're ordered.



MADISON AREA LAKES

At long last the out-of-print 1961
Madison Lakes map has been replaced!
The full-color 1984 Madison Area Lakes
map by D.L. Patterson and M. L.
Czechanski shows much more than its
predecessor. New depth sounding data
from the Department of Natural
Resources is shown in 5-foot contour
itervals enhanced with gradational
tinting. The compilor has included
detailed information on boat ramps as
well as all public access points and
adjacent parks and recreational
facilities.

The map is printed on Tyvek, a tear and water resistent paper by Dupont. It measures 24" x 30" and will be shipped rolled. The cost is \$3.00 (Wisconsinites add 5% tax) plus \$.75 for shipping folded. (Rolled in a tube requires an extra \$.50. Total rolled cost = \$4.25.) The Wisconsin Geological and Natural History Survey plans to issue a less expensive, plain paper edition in the future. Order Map no. 84-1 from the Map Sales, Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706, phone 608/263-7389.

A VOYAGEUR'S GUIDE TO THE LOWER SCONSIN RIVER

rhis 1984 guide was written by Stan Nichols to make travelling down the lower Wisconsin River safer, more enjoyable, and a learning experience. It includes 22 pages of well illustrated text as well as 4 maps of the sections of the river from Prairie du Sac to the Mississippi. The 3/8" = 1 mile maps show access points and public lands along the river. A map showing the river's location in the state and one showing the topographic map coverage of the area are on the insides of the front and back covers. The 6" x 9" booklet is the Wisconsin Geological Survey's Field Trip Guide Book 10. It's \$2.00 (plus 5% tax for Wisconsin residents) with \$.75 postage required. (See previous entry for address.)

SOIL SURVEY OF MONROE COUNTY The USDA, Soil Conservation Service published the Soil Survey of Monroe County in June 1984. It contains 206 pages of text, a color general soil map, and 138 photobased map sheets delineating soil boundaries at a scale of 1:15,840. The survey was done in cooperation with the UW-Madison, College of Agriculture and Life Sciences Research Division. The publication, authored by Wayne D. Barndt and John E. Langton, is available free but in limited quantity. Contact either the Monroe County SCS Field Office in Sparta or the SCS state office at 4601 Hammersley Road, Madison, WI 53711, phone 608/264-5341, ATTN: Soil Survey Section.

RACINE 1:250,000

The U.S. Geological Survey published the updated Racine 1:250,000 in July 1984. The original date was 1958. The sheet measures approximately 22 x 32 inches. The contour interval is 50 feet, with supplemental 25 foot intervals. It's available for \$3.25 (plus tax and shipping) from the Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706, phone 608/263-7389.

ESCANABA 1:100,000

The U.S. Geological Survey issued the Escanaba 1:100,000 intermediate-scale map in mid-1984. The topographic map was done in cooperation with the Bureau

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NEW MAPS, continued

of Land Management. It has 10 meter contour intervals. It's available for \$3.60 (plus tax and shipping) from the Wisconsin Geological Survey. (See previous entry for address.)

GUIDE TO FUN IN WISCONSIN

Wisconsin County Maps contains 2-color maps of varying scales from a wide variety of sources. Maps for counties and state parks and forests show virtually all recreational areas and points of interest. There's a lake index by county too. Copies of the 128-page publication are available for \$9.00 (plus \$1.85 UPS shipping) from Clarkson Map Co., 724 Desnoyer Street, Kaukauna, WI 54130, phone 414/766-3000.



WHAT'S IN THE GLOVE COMPARTMENT?

MAPS, OF COURSE

So, where do they put the gloves? They sure aren't in the glove compartment. That's already filled with maps, insurance forms and broken pens.

A recent survey of motorists found the right side of the car dashboard - which comes with a lock but never is locked - holds just about everything except gloves, despite being listed in all auto manuals as a "glove compartment."

"When asked what they keep in their glove compartment, nobody answered 'gloves'", report the editors of Runzheimer On Cars & Living Costs, a quarterly newsletter published by the management consulting firm of Runzheimer and Co. Inc. in Rochester, Wis.

Half the motorists reported having maps where the gloves should be - or used to be - according to Runzheimer.

In the early days of the automobile, when motorists dressed like lab technicians in goggles, dusters and big gloves for their drives along the dusty, open road, the glove compartment did, indeed, do what it was designed to do: provide a storage area for gloves and other driving gear.

Still later, as more and more women took to the road, some in white gloves, the glove compartment continued to live up to its billing.

But in more recent years, as driving became less adventurous and more comfortable and motorists stopped dressing up especially for the occasion (and women in particular stopped wearing gloves), the contents began changing.

In addition to maps, according to Runzheimer, 31 percent of the motorists in the survey said they keep insurance and auto registration cards there.

Other items included: sunglasses, 23 percent; pads of paper, 14 percent; tissues, 13 percent, and cassette tapes, 11 percent.

The Runzheimer newsletter suggests in conclusion: "Perhaps it should be called the miscellany box."

source: William Dunn, The Detroit News

(note: Your Editor's glove compartment bulges with maps.)

EVENTS, PAST AND FUTURE

EARLY CHICAGO, October 29 - November 9
The Southern Lake Michigan Section of
the American Congress on Surveying and
Mapping is sponsoring a cartographic
exhibit of early Chicago at the Richard
J. Daley Center (Chicago's Civic Center).
It focuses on early maps, from
Marquette's 1670 map to the map of the
I&M Canal, 1835. The Section plans to
expand the display in 1985 to celebrate
the 200th anniversary of the Northwest
Ordinance which created the National
Public Land Survey System.

SOUTHERN LAKE MICHIGAN SECTION, ACSM, November 2

The Section is holding its fall meeting in Chicago at the Bureau of Maps and Plats where Charley O'Connor will demonstrate their computerized land records system. Then the SLMS will tour the Chicago Title and Trust pany. Their records survived the Chicago fire and are considered legal documents.

The winter meeting will be in January at the Clock Tower Inn in Rockford, Illinois. All ACSM members and their guests are welcome to attend. Contact Richard Corbett at 334 W. Crystal Street, Mundelein, IL 60060, phone 312/450-5363 for more information.

WESTERN GREAT LAKES REGION, ASP, November 9

The local region of the American Society of Photogrammetry will include a tour of Chicago Aerial Survey, Inc. in its fall meeting. CAS uses state-of-the-art automated mapping equipment in its photogrammetric survey and resource information services.

Following dinner at the Salt Creek
Country Club, Thomas Carlsen, Wisconsin
partment of Transportation gineering Services, will lead a
discussion on production-mode digital
mapping.



For information on upcoming WGLR meetings contact Christine Reinhard at 608/262-6850 or Prof. Dick Dahlberg at 815/753-0631.

GARDENS OF DELIGHT, A MAP EXHIBIT November 1 - January 31, 1985 The Hermon Dunlap Smith Center for the History of Cartography at the Newberry Library announces "Gardens of Delight", an exhibition of maps and travelers' accounts of the Great Lakes, drawn from the collection of the late Hermon Dunlap Smith. Since his death in 1983, the Hermon Dunlap Smith Trust has endowed the Center with nearly \$1.3 million. The exhibition marks the opening of the new Hermon Dunlap Smith Exhibition Gallery at the Newberry, funded by the Field Foundation of Illinois. Admission to the exhibit is free and open to the

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EVENTS, continued

public. Hours are Monday, Friday, and Saturday from 9:00 a.m. to 5:30 p.m., and Tuesday through Thursday from 9:00 a.m. to 8:00 p.m.

A poster reproducing Nicolas Sanson's 1656 map of the the Great Lakes region and an illustrated catalog of the exhibition are available for sale in the Newberry's Bookshop. For more information contact the Newberry Library, 60 West Walton Street, Chicago, IL 60610, phone 312/943-9090, extension 256.

LAND SURVEYING REFRESHER, January 15 - March 5

The LAND SURVEYING REFRESHER course will be presented in eight, two-hour sessions on Tuesday evenings over the Statewide Extension Education Network (SEEN) which interconnects teleconferencing rooms in over 25 Wisconsin communities. At each location you'll hear the program through a speaker and use tabletop microphones to ask questions. Using "Freeze Frame" technology, the instructors will send pictures of slides, schematics, calculations, and other key course materials.

This refresher course is intended for those surveyors who are preparing to take the Wisconsin Land Surveying registration examination. Both the Fundamentals and Principles and practice section of the examination will be covered. Topics include the U.S. public land system, math, legal aspects, instrument adjustment, state plane coordinates, astronomy, photogrammetry, route surveying and property descriptions.

The course will provide an opportunity to prepare for the examination and for individuals to review the basic concepts and skills of Land Surveying. The course fee is \$140. If you would like more details, contact:

Course Information
Donald M. Walker
Course Coordinator

Department of Engineering & Applied Science (Telephone: 608/262-7988)

Course Registration
Janice M. Friis
SEEN/ETN Programming
Department of Engineering
& Applied Science
(Telephone: 608/262-2026).

MAPS AND MINDS, February 14 - March 21 This exhibit of more than 500 images traces the history of cartography from prehistoric times into the satellite age. The State Historical Society will host the exhibit as well as a series of related talks (see article on page 4). Michael Edmonds, Map Curator at the State Historical Society can provide additional information. His address is 816 State Street, Madison, WI 53706, phone 608/262-5867.

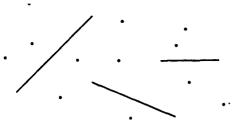
CHILDRENS MAP FESTIVAL, March 20 - 7
The Capital Area Map Alliance (CAMA) is sponsoring a map festival for children in the Washington D.C. Convention Center. Multi-media activities, exhibits and games about maps and geography will hopefully increase children's interest in their world. (See related article on page 17.) For more information write to Map Festival, One Farragut Square West, Washington, D.C. 20036.

MACHINE PROCESSING OF REMOTELY SENSED DATA, June 25-27

The Laboratory for Application of Remote Sensing at Purdue University is sponsoring the Eleventh International Symposium on Machine Processing of Remotely Sensed Data. This symposium will focus on quantifying global processes: models, sensor systems, and analytical methods. For more information contact Vern Vanderbilt, Purdue University-LARS, 1291 Cumberlan Avenue, West Lafayette, IN 47906, phone 317/494-6306.



POINTS AND LINES



AND NOW MENOMINEE

The MENOMINEE County Cartographic Catalog is now at the printer. Brenda will begin distributing them at the end of November. If you'd like a free copy please contact her at 608/262-3065.

DUNN County is nearing completion. We expect it to be available in February. Almost half the state now has cartographic catalog coverage.

EARTH FROM SPACE

The U.S. Geological Survey's National Mapping Program has issued an informative colorful brochure describing various satellite imagery. The brochure, "Index of Earth Resources Observation Systems", explains the Coastal Zone Color Scanner, the Heat Capacity Mapping Mission, Landsat, Seasat, and Shuttle Imaging Radar. A full color, 17" x 21", Landsat 4 T matic Mapping image over southern ifornia is on the back. For a free copy, contact the NCIC, Mid-Continent Mapping Center, U.S. Geological Survey, 1400 Independence Road, Rolla, MO 65401, phone 314/341-0851. If you have an interest in old or new maps or air photos, NCIC probably has a brochure on the subject. Ask and you shall receive.

CART LAB NEWS

The UW-Madison Cartographic Lab is undergoing policy restructuring. As a result, there is no product news to report. However, Howard "Howie" Mead, Head of the Computer-Assisted Branch, has taken a position with the University's Madison Academic Computer Center beginning October 22nd. The Lab and the SCO wish him well in his new post.

MINOCQUA MAP

On page 13 of the July <u>Bulletin</u> we incorrectly placed Dorwin's 15' 1:24,000 Minocqua quadrangle 15 minutes too far t. Please adjust your mental map by moving it one space east.

CAMA

The Capital Area Map Alliance (CAMA) is a Washington, D.C. based, all-volunteer, non-profit organization founded by a group of map makers and map sellers who are very concerned about the sorry state of geographic and map knowledge among U.S. schoolchildren. They are sponsoring a map festival for children on March 20-24, 1985 at the D.C. Convention Center. Several major map producers have donated money and materials. CAMA is looking for private donations (tax deductable). The categories are "I Like Maps, \$10"; "Map Enthusiast, \$20"; and "I Live for Maps, \$50+". For more information write: Map Festival, One Farragut Square, Washington, D.C. 20036.

MAP POSTCARDS ALMOST FINISHED

They keep coming in! Thank you to Michael Edmonds, Morgan & Edward Roberts, William McCall, Nan Picket, Mike Gallagher, Mike Nee, Jack Hailman, Don Larson, and M.J. "Bud" Flood. All we're missing is Alabama.

DON'T STOP LOOKING

<u>Bulletin</u> reader Dick Clarkowski of Eau Claire told us about two other postcard collectors in that city. Your Editor called both of them to find out more about their collections.

Mr. Leo Smith is 81 years old (as of October 20th) and has been collecting city postcards for 10 to 12 years. He has 10 volumes with about 2,000 cards from 900 different cities. Mr. Smith is quite active. (He was out doing errands when I first called.) He'd be very happy to receive cards from the cities you visit or live in. His address is: Mr. Leo Smith, 1831 Folson Street, Eau Claire, WI 54703.

Mrs. Amanda Greene has been collecting map postcards as well as postcards of state capitals for five years. She (continued next page)

POINTS AND LINES, continued

collected many of them on bus tours but now, at 76, she doesn't know if she'll be doing much travelling. She's especially interested in collecting the large "continental" size map postcards for Louisianna, Connecticut, New Hampshire, Vermont and Maine. If you have any of these or other map postcards, please send them to Mrs. Greene at 1907 Fenwick Street, Eau Claire, WI 54701.

GLOBAL GIFTS

Browsing the I. Magnin catalog brought two "map" items to the Editor's attention:

"What to give your globe-trotting friend? Our exclusive world sweator, of course! Our handloomed heavy cotton pullover with easy ragland sleeves is cobalt blue colorfully appliqued front and back with the continents of the world. From Designs by Roc." It's yours for only \$148.00, plus \$3.00 shipping.

If that's a little much, try this:

"Globe, pillow, playball---Hug-A-Planet ** will be the easiest geography course your child will ever take. By International Playthings in brightly colored polyester-cotton with a polyurethane filling, 11" diameter." It's a mere \$18.00, plus \$3.25 shipping.

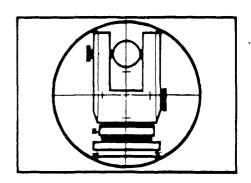
For more information write to I. Magnin at Union Square, 135 Stockton Street, San Francisco, CA 94108 (Hint: The Editor wears a small.)

REMOTE SENSING BROADCAST

There's no RSB supplement with this issue of the <u>Bulletin</u>. Ms. Diane Chung, RSB co-editor, transferred to Oregon State University. When Prof. Tom Lillesand of the Environmental Remote Sensing Center finds her replacement, RSB will continue once again. You'll find remote sensing articles scattered throughout the Bulletin in the meantime.

GEOGRAPHIC NAMES

July's <u>Bulletin</u> had the first part of a two part article on the U.S. Geological Survey's Geographic Names Information Systems. The second half will be in the January issue.



ITC

The following is an excerpt from a letter to Ms. Laurie Boyer (formerly with the SCO) from H. Th. Verstappen of the International Institute for Aerial Survey and Earth Sciences (ITC) in the Netherlands.

"You may or may not be aware of the fact that geomorphology, geology and mining (Delft) now together form the Department of Earth Resources. Our relationships with soils and rural surveys remain interdepartmental. This new set-up leads also to considerable restructuring of courses which are now being organized into modules, each module lasting 2 to 4 months. We hope to send around folders and brochures of our "face-lifted" courses soon.

To optimize the distribution of these materials, I would appreciate it if you could provide me with the names and addresses of organizations in your country which might be interested in sending staff for training in our ITC courses in geomorphological survey, terrain analysis and surveying for environmental hazards such as flooding, drought/desertification, slope instability/erosion, volcanic and earthquake hazard zoning. Your help in this respect will be very much appreciated."

Please address all correspondence to the Institute, ITC, 350 Boulevard 1945, P.O. Box 6, 7500 AA Enschede, The Netherlands, phone 053-32 03 30.

**UPDATE: Also from GREENPEACE for only \$14.95 (+ \$3.00)! Call 1-800-772-7272, ext. 120.

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Wisconsin Mapping Bulletin

October 1984

COASTAL ENERGY IMPACT PROGRAM IN NE WISCONSIN

ing 1983 the Bay-Lake Regional
Planning Commission undertook a
hazardous materials and environmental
areas computer mapping project through
the Wisconsin Coastal Zone Management
Program, Coastal Energy Impact Program
(CEIP).

Upon approval of the CEIP grant, the Commission developed graphics for the Hazardous Material Spill Contingency Plan, being prepared by the U.S. Coast Guard and Wisconsin Department of Natural Resources. It was determined that the agencies would list the information necessary for the plan and to establish a priority location list within the region.

Each of the 13 areas that had a designation of priority area was thoroughly inventoried for all information available to the Bay-Lake staff. Every item was symbolized and appeared the same on all of the maps.

e computer system had three color capabilities which added to simplifying the map legend.

The Bay-Lake staff mapped all of the data and information gathered during the grant period onto 1" = 800' aerial photographs. The format would delineate both environmental sensitive areas and hazardous material handling areas. The aerial photography mapping was then given to the University of Wisconsin-Green Bay Cartography Lab for digitizing and production of computer maps.

Having access to the University of Wisconsin-Green Bay Cartographic Laboratory's computer mapping facilities, the Commission decided the advantages of computerizing included:
(1) rapid transferability via telephone modem, (2) rapid map production, and (3) simple map alterations.

The computer maps were printed at a ale of 1:24,000, however, the scale can be adjusted to any size within the capability of the computer. If desired, a printout of a specific site within a

map could be printed. The computer mapping project terminated December 1983 at the end of the CEIP grant program.

source: <u>Bay-Lake RPC 1983 Annual</u> Report

LANDSAT

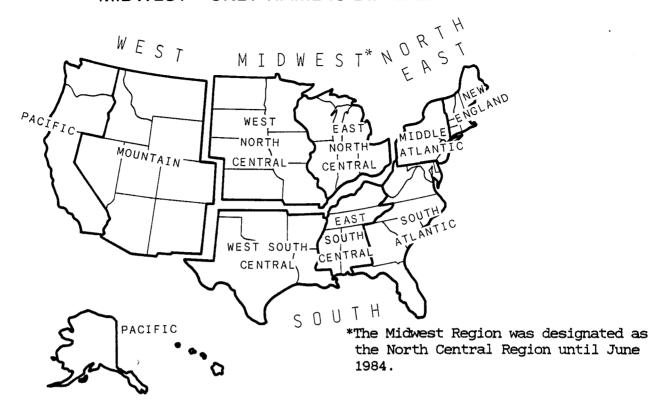
COMMERCIALIZATION

PASSES

The Senate, on June 8, approved by voice vote H.R. 5155, the Land Remote Sensing Satellite Commercialization Act. Senate bill differs from its House counterpart in several aspects, including specific mention of the level of sensor technology to be required. While the House bill has an American Society of Photogrammetry-opposed provision that would require the Multi-Spectral Scanner (MSS) as a minimum, the Senate bill simply requires the Secretary of Commerce, when awarding a contract for commercial operation of Landsat, to consider the "qualities of data expected from the system." The Senate bill also contains a provision suggested in Dr. Tom Lillesand's (U.W. Madison) testimony to authorize continued research and development of remote sensing technology and global environmental monitoring. Differences between the House and Senate bill must now be resolved before the legislation goes to the President. Once the bill is signed, the Secretary of Commerce may enter into a contract for commercial Landsat operation. As of August, the Commerce Department has completed its procurement of a commercial operator, whose identity will be released soon.

source: ASP <u>Photogrammetric Engineering</u> & Remote Sensing

MIDWEST -- ONLY NAME IS DIFFERENT



Since the 1950's, the Census Bureau has identified the mid-western section of the country as the "North Central Region." To make the region identified clearer to users, Census changed the name to the "Midwest Region," an identification that will appear in future Bureau data products.

As the map shows, the region is one of four census regions, the others are the

HIGHEST POINT

Dan Dillon of Prentice High School kindly informed us that the highest point given in the puzzle inside the July mailing cover is incorrect. Timms Hill in Price County is 1,951.5 feet, 11.5 feet taller than the puzzle listed.

Timms Hill has other problems. The U.S. Geological Survey spells it Timms while the Wisconsin Dept. of Transportation spells it Tim's. It's also been spelled Timm's. Tom Carlsen of the D.O.T. reports that on future highway maps it will be spelled Timm's. It would have been simpler if Pearson Hill right next door had been just 0.8 feet higher.

Northeast, South, and West.

The change is in name only. There has been no change in the States that make up the region. The region is still made up of two census divisions: the East North Central and the West North Central. The divisions are unchanged.

source: Census Data Users News

MORRISON ICA PRESIDENT

Former UW-Madison professor, Dr. Joel L. Morrison, was elected President of the International Cartographic Association (ICA) on August 13, 1984. The election was held during the 7th General Assembly and 12th International Conference of the ICA in Perth, Western Australia, August 4 to 13, 1984.

Dr. Morrison was with the University from 1968 to 1983 serving as Geography Department Chairman from 1977 to 1979. He is the Senior Scientific Advisor for Geography in the National Mapping Division of the U.S. Geological Survey and resides in Reston, Virginia.

NOAA PRICE LIST--LANDSAT DATA PRODUCTS EFFECTIVE 6-25-84 THROUGH 9-30-86

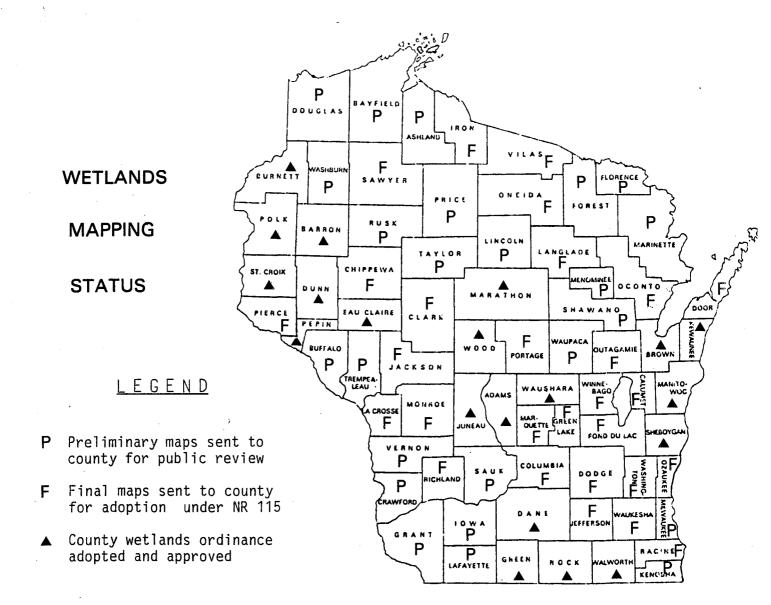
On June 25, 1984, NOAA made a public announcement of the prices to be in effect through fiscal 1986. The announcement was made at this time for the following reasons:

- 1) To clarify the product line and improve readability and understanding of the prices.
- 2) To indicate that the market for Landsat data products is stable.
- 3) Publicize the stability to allow users to make decisions regarding data purchases and to structure their organization's budget cycles more effectively.

TYPE OF PRODUCT OR SERVICE	RETURN BEAM VIDICON & MULTI-SPECTRAL SCANNER	THEMATIC MAPPER		
Image Products*	Present Feb. 1, 1985	Present Feb. 1, 1985		
10 in. film BW neg	\$30\$35 \$35\$40 \$30\$35 \$58\$65 \$95\$105 \$74\$80 \$45\$50 \$90\$110 .\$175\$195	\$60\$80 \$50\$75 \$95\$140 \$150\$200 \$140\$190 \$115\$170 \$200\$235 \$275\$290		
SERVICES Color Composite Generation	.\$195\$220	\$305\$325		
MSS Computer Compatible Tape, CCT, Full Scene, 9 track, 1600 or 6250 BPI, 1 tape	.\$650\$730	N/AN/A		
RBV CCT single sub- scene, 9 track, 1600 or 6250 BPI, 1 tape	.\$650\$730	N/AN/A		
RBV CCT full scene 9 track, 1600 or 6250 BPI, 1 tape	\$1300\$1460	N/AN/A		

(continued next page)

TYPE OF PRODUCT OR SERVICE	RETURN BEAM VIDICON & THEMATIC MAPPER MULTI-SPECTRAL SCANNER				
Image Products*	Present	Feb.	1, 1985	Present	Feb. 1, 1985
TM CCT full scene 1600 BPI, 12 tapes** 6250 BPI, 4 tapes 9 track tape	N/A	N/A		\$3400	\$4400
TM CCT Quarter-scene 1600 BPI, 3 tapes 6259 BPI, 1 tape 9 track	N/A	N/A	• • • • • • • • • • • • • • • • • • • •	\$925	\$1350
Note: CCT Computer Compatible * Nominal Sizes ** TM SCROUNGE data is available 1600 BPI, 7 tapes 6250 BPI, 3 tapes	_	9 trad	ck.		
SPECIAL ACQUISITION PLUS PRODUCT COST					
Delivery of MSS/TM HDT via Communication Satellite per scene\$	790	\$885	5	\$1200	\$1600
Delivery of Standard MSS/TM Imagery (not color composite) per scene\$	880	\$985	5	\$1460	\$1995
Delivery of MSS/TM CCT or HDT per scene\$1	000	.\$1120)	\$4000	\$5200
Surcharge for color composite generation for customer ordering acquisition - per scene**\$	150	. \$170	o	\$250	\$275
Surcharge for specified maximum cloud coverper scene\$	250	\$275	5	\$250	\$275
Note: CCT = Computer Compatible HDT = High Density Tape ** Bands must be ascending	_	equenc	ce must be g	green, blue	e, red.



Steve Fix, Department of Natural Resources Wetlands Inventory, reported in the July <u>Bulletin</u> that the wetlands inventory mapping was completed. The above graphic shows the status of the required public review by each

county. Final maps can be purchased from the Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706, phone 608/263-7389. For more information on the program, contact Steve at 608/266-0053.

WETLANDS MAPPING

The Association of State Wetlands
Managers held its inaugural meeting
Sept. 18-21, 1984 in Gainesville,
Florida. This professional organization
was formed to fill an informational
exchange and inventory need in building
state wetland management capabilities.
The aim is to form an effective federal,
state and local partnership. This
partnership, through the Association,
will seek to address program
coordination, oversight, technical
assistance, education, monitoring,
regulations, acquisitions, tax

incentives and other approaches.

One of the standing committees of the ASWM is one on mapping. This committee will look at the various state, regional, and local wetlands mapping efforts and technical aspects. It will act as a clearinghouse for information for agencies which may want to initiate their own mapping programs, including automated aspects. For more information contact: Steve Fix, P.O. Box 7921, Madison, WI 53707, phone 608/266-0053.

INERTIAL SURVEY

During a twelve day period in midOctober, the Dane County Land Records
Project conducted a unique inertial
surveying project. The Bureau of Land
Management (BLM), Division of Cadastral
Survey loaned the UW-Madison an inertial
surveying system (ISS), a Litton AutoSurveyor. Two BLM inertial surveying
specialists/operators accompanied the
equipment and coordinated the field
survey and data reduction.

This type of ISS was developed from the inertial guidance systems used for navigation in ships, submarines, aircraft and space vehicles. The ISS arrived in Madison from Alaska, where the BIM extensively uses it mounted in helicopters for original surveys of public lands. For the survey in Dane County, the crew mounted the ISS in a four-wheel drive Blazer since all the points to be surveyed were located in or adjacent to roadways.

The survey data collected will provide a means for evaluation of current inertial surveying technology as a tool for establishing geodetic control on U.S. Public Land Survey System corners in support of multipurpose land information system development. Geodetic coordinates of numerous other points were also determined with the ISS to provide the control necessary for studies of the positional accuracies of resource boundaries depicted on existing wetlands and soils maps. The wetlands study is now underway in cooperation with the Wisconsin Department of Natural Resources.

For more information contact Prof. Dave Mezera, 1214 Civil and Environmental Engineering, Madison, WI 53706, phone 608/262-4365.





COUNTY SURVEYORS ASSOCIATION

The Wisconsin County Surveyors Association has elected a new Board of Directors. They are:

President

Roger Laning, Sheboygan County, 1211 No. 23rd. Street, Sheboygan, WI

53081

Vice-President G. Robert Sheffers,

Pierce-Pepin-Buffalo
County, 278 Tower
Heights County Process

Heights Court, Prescott,

WI 54021

Secre.-Treas.

Donald Barnes, Rock County, 52 South Main Street, Janesville, WI

53545

Director

Donald Panetti, Fond du Lac County, 301 Dixie Street, Box 1253, Fond

du Lac, WI 54935

Past-President Les Van Horn, Brown

County, Brown County Courthouse, Green Bay,

WI 54301

The bottom of their letterhead reads "SS59.635 (5) provides up to \$1,000 fine for removing, destroying or making inaccessable any landmark or survey monument of record".

LAND SURVEYORS

Regulation of the professions in consin is done primarily through __mining Boards in the Department of Regulation and Licensing. Examining boards comprise both members of the profession and public members. All members are appointed by the Governor and confirmed by the Senate.

If you are qualified for one of the offices listed or know of someone who is qualified, please make your candidacy or candidate known to the Office of the Governor by sending a letter describing the candidate, a resume and references to Suellen Albrecht, Appointments Director, Office of the Governor, Room 115 East, State Capitol, Madison, Wisconsin 53702.

ARCHITECTS, PROFESSIONAL ENGINEERS, DESIGNERS & LAND SURVEYORS EXAMINING BOARD

Members: 20 (8 Public Members; 12

Professional Members of 3 architects, 3 professional engineers, 3 designers and

3 land surveyors)

Term:

4 years (staggered)

expires July 1.

Statute: s. 15.405(2) All members

are appointed by the

Governor.

The board licenses and regulates architects, professional engineers, designers of engineering systems, land surveyors, engineers-in-training, and architectural and engineering corporations and partnerships. board conducts much of its business through subunits (Sections) of the board. The average number of meetings per year for the Sections are: Architects 8; Engineers 12; Designers 4; Surveyors 8. Meetings are held in Madison.

" a Bureau of Design Professions in the artment of Regulation and Licensing provides administrative services for this board. Questions about board

related business may be directed to the bureau at (608)266-1397.

REQUIREMENTS TO HOLD OFFICE

A member must be a Wisconsin resident and may not be an officer, director or employee of a private organization which promotes or furthers the profession regulated by the board.

A public member may not be or ever have been licensed or engaged in any profession licensed or otherwise regulated by the board, or married to any licensee, or employ, be employed by or be associated professionally with any board licensee.

Professional members must hold a license to practice in Wisconsin.

LAND SURVEYORS SECTION

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al de la

Frederic Copp Route 1, Box 141 Woodruff, WI 54568 (715) 385-2373 July 1, 1987 Land Surveyor

Donald L. Paulson 815 Forward Drive Madison, WI 53711 (608) 271-9651 July 1, 1985 Land Surveyor

Mary Hall Sullivan, Secretary 1610 North Prospect, #1104 Milwaukee, WI 53202 (414) 347-1012 July 1, 1985 Public Member

Bernard L. Watermolen, Chairman 1424 Avondale Drive Green Bay, WI 54303 (414) 494-5928 July 1, 1986 Land Surveyor

VACANCY Public Member

STATE RESIDENT CARTOGRAPHERS

The U.S. Geological Survey for the past few years has operated a cooperative liaison agreement with the western states. There are currently five state resident cartographers:

HAWAII & PACIFIC
Mr. William A. Olson, Jr.
State Resident Cartographer
U.S. Geological Survey
Water Resources Division
P.O. Box 50166
Honolulu, HI 96850

Mr. Michael L. Sety State Resident Cartographer Department of Lands Statehouse Boise, ID 83702 phone: 208/334-2419

IDAHO

Mr. Eugene S. Faust
State Resident Cartographer
c/o Nevada Bureau of Mines and Geology
Mackay School of Mines
University of Nevada
Reno, NV 89557-0088
phone: 702/784-5012

OREGON
Mr. Glenn W. Ireland
State Resident Cartographer
U.S. Geological Survey
847 N.E. 19th Avenue, Suite 300
Portland, OR 97232

Portland, OR 97232 phone: 503/231-2019

WASHINGTON
Mr. Gary L. Calder
State Resident Cartographer
Photos, Maps & Reports Section
Department of Natural Resources
Public Lands Building, QW-21
Olympia, WA 98504
phone: 206/753-5338

Only South Carolina and Wisconsin have state cartographers solely supported by state funding.

THE STATE

CARTOGRAPHER'S OFFICE
ISSUES THE WISCONSIN
MAPPING BULLETIN IN
JANUARY, APRIL, JULY
AND OCTOBER. IT IS
DISTRIBUTED FREE OF CHARGE
ON REQUEST.

THE EDITOR WELCOMES

NEWS ON COMPLETED

OR ONGOING PROJECTS,

PUBLISHED MAPS OR

REPORTS, AND

CONFERENCES/WORKSHOPS. LOCAL

AND REGIONAL INFORMATION IS

ESPECIALLY REQUESTED.

PLEASE SEND ALL COMMENTS, CORRECTIONS, AND NEWS ITEMS TO:

CHRISTINE REINHARD,

STATE
CARTOGRAPHER'S
OFFICE,

144 SCIENCE HALL MADISON, WI 53706, 608/262-3065.