During June 1980 a contract was finalized between the State Cartographer's Office and the U.S. Geological Survey for the cooperative mapping of four prototype 7½' topographic quads in the Sturgeon Bay 15' quad area in Door County. The prototype quads will be on the standard 7½' format with the following additions:

1. Increased nearshore contour interval. The lake level of Lake Michigan is approximately 580 feet. These quads will have, in addition to the standard 10-foot contour interval, the 582.5, the 585 and the 587.5 foot contours portrayed on the nearshore area of Lake Michigan and Green Bay.

2. The bathymetric offshore information in depth curves will be enhanced and a gradient tint system will depict the depth of water.

The agreement also calls for the priority production of these quads. Lithographic copies of the quads are now scheduled to be available by November 1981. While the U.S. Geological Survey has produced this type of quad on the Eastern seaboard, primarily in the Florida and Georgia Atlantic coastal areas, this production will be the first in the Great Lakes area. The funding for this project was through a special appropriation to the State Cartographer's Office for developmental and prototype mapping that would be beneficial to the State of Wisconsin.
NEWS FROM U.S.G.S.

LAND USE/LAND COVER MAPS

Land use and land cover maps at a scale of 1:250,000 are being produced as part of the Geography Program of the U.S.G.S. These maps show current land cover which is quite perishable. Therefore U.S.G.S. attempts to distribute the maps as quickly as possible. Most maps are 2-color but the Survey is experimenting with adding more colors. In Wisconsin open-file maps are available for the GREEN BAY, ST. PAUL and MADISON 1:250,000 maps. Planned production in fiscal year 1980 includes ASHLAND and STILLWATER. Authorized for production are Milwaukee, Racine, Rockford and Dubuque. For more information contact the U.S.G.S. Mid-Continent Mapping Center, 1400 Independence Road, Rolla, MO 65401. See facing map.

SURFACE MINERAL MANAGEMENT AND SURFACE STATUS MANAGEMENT MAPS

The Bureau of Land Management (BLM) has printed a series of medium-scale maps in northern Wisconsin indicating ownership of land and the ownership of surface minerals. The maps are overprints of the U.S. Geological Survey 1:100,000-scale (1" = 8,333') quadrangle base maps. These base maps are 30 minutes by 1 degree in area and are one quarter of the standard 1:250,000-scale quadrangle.

The series by BLM consists of an overprint called the Surface Status Management which indicates land ownership by various federal agencies and state/local governments. The smallest area shown is 40 acres. The Surface Minerals Management overprint is an additional overprint which indicates types of minerals and their ownership. Not all 1:100,000 scale quads shown on the facing page have both series. However the Surface Minerals Management map shows all the information from both editions. The maps are approximately 28 by 40 inches in size and are printed in 5 to 7 colors, dependent on information shown.

More information on the mapping can be obtained by calling the BLM office in Duluth, MN at (218) 727-6692 Extension 378. The maps are for sale at $2.00 each from the following address:

Bureau of Land Management
Dept. of Interior
125 Federal Building
Duluth, MN 55802

METRIC TOPOGRAPHIC MAPS

The Geological Survey is producing 5-color metric topographic maps in the 30 minute by 1 degree format at 1:100,000 scale. The quad Outer Island (see facing index) was printed in 1978. It contains very little land area in Wisconsin. However the Fond du Lac quad will be printed in August 1980. The maps are complete editions containing hydrography, land lines, roads including city street patterns, county and state boundaries, railroads and other cultural features, names, vegetation and a 10-meter (32.8 foot) contour interval.
MEDIUM-SCALE MAP PRODUCTION: LAND USE/COVER; TOPOGRAPHIC; MINERAL OWNERSHIP

U. S. Geological Survey, Land Use and Land Cover Mapping
1:250,000-scale Quads

1. ASHLAND: Open File, Scheduled for printing, October 1980
2. STILLWATER: Open File, Scheduled for printing, October 1980
3. ST. PAUL: Open File
4. GREEN BAY: Open File
5. MADISON: Open File
6. MILWAUKEE: Production authorized
7. DUBUQUE: Production authorized
8. ROCKFORD: Production authorized
9. RACINE: Production authorized

Mineral Ownership (BLM) and Topographic (USGS)
1:100,000-scale Quads

b. ASHLAND: Surface Mineral Management (1980)
c. WAKEFIELD: Surface Mineral and Surface Management Status (1980)
d. IRON RIVER: Surface Mineral and Surface Management Status (1980)
e. RHINELANDER: Surface Mineral and Surface Management Status (1980)
g. MERRILL: Surface Mineral Management (1980)
h. FOND DU LAC: Topographic, scheduled to be printed August 1980

See facing page for more information
NATIONAL MAPPING DIVISION

A new organization for mapping the nation has been formed by the U.S. Geological Survey, Department of the Interior. It is designed to expand the application of advanced cartographic and geographic science in resource management.

The reorganization establishes a new major operating division of the U.S.G.S. - the National Mapping Division - by combining three previously separate Survey units: the Topographic Division, the Publications Division, and the Geography Program. R. B. Southard is the chief of the new office.

The National Mapping Division is now responsible for conducting the National Mapping Program of the United States, and will work with more than 30 federal agencies and all of the states to assess public mapping needs, establish priorities, and oversee production of maps and related cartographic and geographic information.

Management of the National Cartographic Information Center (NCIC) at Reston will be under the new division and it will provide staff support for the U.S. Board of Geographic Names. The division's four mapping centers at Menlo Park, Denver, Rolla, and Reston will continue map compilation and production work. Maps are printed at the U.S.G.S. National Center at Reston.

SURVEYING COURSE

Surveying and Photogrammetry, a series of Civil and Environmental Engineering home study courses, is now available from the University of Wisconsin-Extension. Four courses comprise the series: Elementary Surveying I, Elementary Surveying II, Advance Surveying, and Photogrammetry.

The courses are for those working in construction, surveying, cartography and other technical fields. The courses are useful to persons preparing for new job responsibilities and for professional licensing.

The surveying course topics include: measurement of angles and distances, leveling and cross sectioning, area and traverse computations, horizontal and vertical curves, state and US plane coordinate systems, astronomical and solar observations, topographic mapping and land surveying.

The photogrammetry course teaches the basics of metric photogrammetry, measurements and interpretive photogrammetry, and recognition principles. The photogrammetry course is announced in cooperation with the American Society of Photogrammetry.

Complete information and enrollment forms for the new series, SURVEYING AND PHOTOGRAHAMETRY, may be obtained by writing Professor C. Allen Wortley, Department of Engineering and Applied Science, Room 713, University of Wisconsin-Extension, 432 North Lake Street, Madison, WI 53706; or by calling (608) 262-0577.
NEW PRODUCTION FROM U.S. GEOLOGICAL SURVEY

These newly published 7½' topographic quadrangle maps (1:24,000) are listed by their location on the superseded 15' topographic or planimetric map of the area. They are available from the Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706 (608) 263-7389. Topographic quadrangles are $1.50 each.

1 BRANTWOOD 15' PLAN
   NE½ None
   NW½ Dover '79
   SW½ None
   SE½ Brantwood '79

2 NEILLSVILLE 15' TOPO
   NE¼ Loyal West '79
   NW¼ Willard '79
   SW¼ Columbia '79
   SE¼ Neillsville '79

3 MARSHFIELD 15' TOPO
   NE½ Hewitt '79
   NW½ Marshfield '79
   SW½ Lake Manakiki '79
   SE½ Arpin '79

PHOTOREVISED 15' TOPOGRAPHIC QUADS
   a Lakewood, MN PR '75

Order 7½' quads by name, NOT by the index number or letter used here for locational purposes.

The Map Sales Office of the Wisconsin Geological Survey is now in the capable hands of Rochelle Juedes. Rochelle worked with Kathie Zwettler who has taken the position of Administrative Secretary at the Survey.
COMING EVENTS

WIS. SOCIETY LAND SURVEYORS
Seminar; August 22-23; Telemark Lodge, Cable, WI; Contact Ronald L. Peterson, Hayward, WI (715) 634-2442.

6TH NEBENZAHL LECTURES
"Art and Cartography" at the Newberry Library, Chicago, October 30 - November 1, will feature:

Prof. George Kish, Univ. Mich., "Maps and the decorative arts of the Renaissance"

Prof. Juergen Schulz, Brown Univ., "The use of maps in Italian mural decorations"

Ulla Ehrensvård, Royal Library, Stockholm, "The decorative and iconographical use of color in cartography"

David Woodward, Newberry Library, "Typography, calligraphy, and cartography"

James Welu, Worcester Art Museum, "Sources for ornamentation on 16th and 17th century cartography"

Prof. Samuel Y. Edgerton, Jr., Boston Univ., "The influence of Renaissance art on the scientific revolution: Ptolemaic cartography and scientific illustration"

Prof. Svetlana Alpers, Univ. California-Berkeley, "The mapping impulse in Dutch art"

The series will be chaired by Dr. Helen Wallis of The British Library. An exhibition will be held concurrently with the lectures. The Nebenzahl lectures are free and open to the public. For more information contact David Woodward, The Newberry Library, 60 West Walton St., Chicago, IL 60610 (312) 943-9090, ext. 214.

CARTOGRAPHIC INFORMATION SOCIETY
Organizational meeting of a new professional organization; Milwaukee; October 2 - October 4. See page 13 for more information.

SURVEYORS HISTORICAL SOCIETY

A new organization, the Surveyors Historical Society, has been formed in California to preserve and display information and equipment used by land surveyors and other related fields. The organization is not limiting its sights on California or any fixed geographical area at this time.

For additional information, contact Chairperson F. D. Uzes, c/o Surveyors Historical Society, 10324 Newton Way, Rancho Cordova, CA 94670.
If you happen to be driving through central Wisconsin and see a tower similar to the one sketched at right you are observing the National Geodetic Survey (N.G.S.) increasing the density of first-order horizontal control survey stations. The project is in cooperation with the Special Services Section, Department of Transportation. It was summarized in the April 1980 Bulletin. The small area map indicates the extent of the project in a ten county area. The tower is called a "Bilby" and is used for long-range observations, many being done at night to avoid heat convection in the air which distorts line of sight. The N.G.S. during 1980 and 1981 will locate 52 new first-order positions. The D.O.T., working with the federal crews, will add between 170 and 200 second-order class 1 horizontal control stations. The N.G.S. has quoted a cost of approximately $6,000.00 per station location. The D.O.T. is saving labor costs by coordinating their program with the N.G.S.
UPDATES

COUNTY CARTOGRAPHIC CATALOGS
County Cartographic Catalogs continue to be released by the State Cartographer's Office. Since the last report in the January Bulletin catalogs for LA CROSSE, LANGLADE, OZAUKEE, SAUK and KENOSHA have been published. The Office has finalized drafting specifications, operational procedures and during the summer has a student staff working intensively on catalog production. Financial assistance for printing provided by the Wisconsin Coastal Management Program has shifted production emphasis to the coastal counties. By October the following catalogs should be available: Racine, Sheboygan, Manitowoc, Kewaunee, Door and Brown.

U.S.D.A. PHOTOGRAPHY
The July 7th report received from the U.S. Department of Agriculture Aerial Photographic Laboratory in Salt Lake City indicates the following Wisconsin county photography has been flown and accepted in June by the lab: FLORENCE, FOREST, MARINETTE, ONEIDA, VILAS and WASHBURN. The photography is black-and-white panchromatic at 1:40,000 scale (1" = 3,333') except for Washburn which is at 1:48,000 scale (1" = 4,000'). In addition DOUGLAS and PRICE counties have been flown but have not yet been accepted by the Lab. The report also indicates an additional 17 Wisconsin counties scheduled by the U.S.D.A. for acquisition this summer. The October Bulletin will report on the Lab's progress.

DANE COUNTY AIR PHOTOS
During April Aero-Metric Engineering Inc. of Sheboygan completed the acquisition of aerial photography on DANE County as described on page 2 of the April Bulletin. Aero-Metric has completed the processing of the negatives of the color, 1" = 800', photography. The Dane County Regional Planning Commission is completing a quality control check of the negatives.

Dane County R.P.C. has placed a bulk order for 6,221 color paper prints, 48 1" = 200' paper enlargements and 39 black-and-white enlargements at a scale of 1" = 200'. Aero-Metric is now processing the initial order with delivery by mid-August. The Dane County R.P.C. is planning to submit another bulk order on October 31, 1980. Inquiries should be directed to Jon Corson-Rikert, Dane County Regional Planning Commission, 210 Monona Ave., Madison, WI 53709 (608) 266-4139.

The U.W.-Madison Map and Air Photo Library has purchased a complete set of the stereographic (overlapping) prints. These photographs should be available to library users by September. The Map Library is located at 384 Science Hall, 550 N. Park Street. Miss Mary Galneder, Map Librarian, can be reached at (608) 262-1471.
AIR PHOTO ENLARGEMENTS

(Reference Bulletin Vol. 6, No. 2, page 9)

As planned the Special Services Section of the Wisconsin Department of Transportation continues to process enlargements, at 1 inch = 400 feet, of the state's unified aerial acquisition of 1978 and 1979. The accompanying status map indicates over 80% of the required enlargements are available. Less than 2000 additional enlargements remain to complete the state. Special Services plans to complete the camera work by the end of 1980. This length of time is required because of the several refights needed this summer to improve the quality level of previously unacceptable photography.

The program appears to have wide acceptance. A summary of orders as of July 1 shows that the D.O.T. has processed the following number of items:

- 23,400 diazo enlargements at 1" = 400'
- 11,000 contact paper prints at 9" by 9"
- 1,300 screened enlargements of film at 1" = 400'

For ordering information contact:

Special Services Wis. Dept. of Transportation
P.O. Box 7916
Madison, WI 53707
(608) 266-0309

PRICE LIST

Contact Print 9" by 9"  
(1" = 1,667' scale)  
Photographic paper.........$2.60

Enlargement screened film  
positive, 30" by 30"  
(1" = 400' scale)..........$18.00

Diazo paper print, 30" by  
30"; 4 land sections,  
(1" = 400' scale)..........$1.25

Add 4% sales tax plus a $1.50 handling charge and $1.00 mailing charge per order.
COMMITTEE ON STATE CARTOGRAPHY

Professor Joel Morrison, immediate past chairman of the U.W.-Madison Geography Department and Chairman of the Committee on State Cartography will be leaving in September for a one-year appointment with the U.S.G.S. National Mapping Program, Office of Cartographic Research at Reston, VA. Professor Arthur H. Robinson, Professor Emeritus U.W.-Madison Geography Department, will be chairman of the Committee in Morrison's absence. The Committee is comprised of: Dr. M. E. Ostrom, Wisconsin Geological Survey; Prof. Paul Wolf, U.W. Dept. of Civil and Environmental Engineering; Prof. Phil Muehrcke, U.W. Dept. of Geography; Robert Holdridge, Dept of Transportation; Dale Marsh, Dept. of Natural Resources; and Allen Miller, Dept. of Administration.

NAUTICAL CHARTS RENUMBERED

The National Ocean Survey (NOS), in cooperation with the Defense Mapping Agency (DMA), has completed a new chart numbering system that provides a worldwide uniform method of identifying nautical charts.

The basic objective behind the new chart numbering system is the establishment of a "unique number to identify each chart for placement into a logical geographical sequence. As a result, the system takes into account both geographic location and scale." The new system also helps to select, file, requisition, and identify nautical charts in an organized sequence of numbers.

To assist a chart user in transitioning from the old numbering system to the new system, NOS has published Nautical Chart Number Conversion Table. The free 14-page booklet can be ordered from Distribution Division (C44), National Ocean Survey, Riverdale, MD 20840.

STATE DATA CENTER PROGRAM

The basic concept of the State Data Center program involves state-related organizations operating data delivery, analytical, and other user services facilities through a cooperative effort with the Census Bureau. The fundamental objectives of the State Data Center Program are to improve access to and use of census data products, establish a mechanism to provide increased and improved technical services to a larger number of users, reduce costs for providing user services, facilitate coordination of statistical resources, and provide a feedback mechanism to identify user needs and problems.

Contact: Mr. Don Holl
Demographic Services Center
State Department of Administration
1 West Wilson Street, Room B-110
Madison, Wisconsin 53702
608/266-1067
MAPS, MAPS, MAPS, MAPS,

GREAT LAKES COASTAL COUNTIES

Erosion Hazard Areas maps have been prepared by the Wisconsin Geological Survey for the Wisconsin Coastal Management Program. A series of 11 maps (most at 1" = 2 miles) show erosion potential and structural protection. Text on the reverse discusses coastal development and gives sources of information. For a single county or for the series contact the Wisconsin Coastal Management Program, Department of Administration, Madison, WI 53702, (608) 266-3687.

GREAT LAKES MAPS

Facsimiles of 17th, 18th and 19th century maps which show the Great Lakes area are available for about $2.00 from the Association of Canadian Map Libraries. For a catalog/price list write: ACML, c/o National Map Collection, Public Archives of Canada, Ottawa, Ontario KIA ON3.

MILWAUKEE AND WAUKESHA COUNTIES

Map and Street Guide of Milwaukee County and Waukesha County by Milwaukee Map Service, Inc., 4519 West North Ave., Milwaukee, WI 53208; 1980; Price $3.00; Includes southern OZAUKEE and WASHINGTON Counties, zip codes by street and lists of major buildings and places of interest.

RACINE COUNTY

1980 Commercial Atlas of Racine County by The Sidwell Company, 28W240 North Avenue, West Chicago, IL 60185 (312) 231-8200; Contains a half-tone aerial photograph at a scale of 1" = 400' and maps at 1"= 200' showing only subdivided areas.

SHEBOYGAN (city of)

New tax maps at a scale of 1" = 100' each covering a quarter section; map size 36" x 36"; also available spring 1980 aerial photography; a city street map is planned; entire project by The Sidwell Co; contact Roger Eberhardy, City Assessor (414) 459-3388 for more information.

SOIL SURVEYS

The U.S.D.A., Soil Conservation Service in cooperation with the Research Division of the College of Agricultural and Life Sciences, U.W. has issued soil surveys of KEWAUNEE (March 1980) and WINNEBAGO (May 1980) Counties. Contact the appropriate County Soil Conservation Office or the State Soil Conservation Office to obtain single copies.

SOUTHWESTERN WISCONSIN

A Road Map of Southwestern Wisconsin published by Milwaukee Map Service, Inc., 4519 W. North Ave., Milwaukee, WI 53208; 1980?; Price $4.00; Points of interest as well as trout streams are listed.

U.S. COAST PILOT 6

1980 edition available (formerly known as Great Lakes Pilot); More than 600 pages of facts on physical features and information on changes necessary for boaters on the Great Lakes; Purchase from the National Ocean Survey, Distribution Division (C44), 6501 Lafayette Ave., Riverdale, MD 20840 or from local sales agents.
PUBLICATIONS OF INTEREST

MANUAL OF SURVEYING INSTRUCTIONS, 1973
Describes how surveys showing boundaries, property lines, etc. are made in conformance to statutory law and its judicial interpretation. Pocket inside back cover contains samples of a township plat, mineral-patent survey, solar diagram, and polar axis diagram. Clothbound. 1973, reprinted 1979. 333 p., illus., GPO Stock No. 024-011-00052-6, price $11.00.

CONTROL LEVELING
This National Geodetic Survey publication describes the process of control leveling, which is used to determine precise elevations of bench marks above or below a reference surface. 1978. 24 p., illus., GPO Stock No. 003-017-00422-8, price $1.30.

SPECIFICATIONS FOR DESCRIPTIONS OF TRACTS OF LAND FOR USE IN LAND ORDERS AND PROCLAMATIONS


BOUNDARIES OF THE UNITED STATES AND THE SEVERAL STATES
By Franklin K. VanZandt, U.S.G.S. Professional Paper 909. This volume is the latest in the long series of U.S.G.S. Bulletins on the subject published since 1885. It contains a wealth of information for land surveyors and students. The historical outline of individual state's boundaries is concisely written. Excerpts from treaties, court decisions, and technical reports are included. 1976. Soft cover. 191 p., illus., Order from Superintendent of Documents (address above) GPO Stock No. 024-001-02758-5, price $5.20.

A DESCRIPTIVE LIST OF TREASURE MAPS AND CHARTS IN THE LIBRARY OF CONGRESS
Describes selected atlases, charts, maps, and shipwreck lists which are in the collection of the Library of Congress Geography and Map Division. Entire are arranged in two groups: private and commercial works which locate, in a general way, real or alleged treasure sites and officially published nautical and wreck lists which locate, by latitude and longitude, wrecks and other underwater obstructions. 1973, reprinted 1977. 30 p., illus., Order from Superintendent of Documents (address above) GPO Stock No. 030-004-00012-4, price $2.25.

MAPS, MAPS, MAPS, MAPS, continued

WALL MAPS
Milwaukee Map Service, Inc., 4519 W. North Ave., Milwaukee, WI 53208 (414) 445-7361 has recently published three new wall maps:

| Milwaukee Co./Waukesha Co. | 1" = .55 miles | 48" x 70" |
| Racine Co./Kenosha Co. | 1" = .55 miles | 48" x 70" |
| Walworth County | 1" = 1.75 miles | 48" x 55" |

Unmounted paper map $55; Unmounted laminated map $75; plus shipping and Wisconsin sales tax.
The organizational meeting of a new professional association, the Cartographic Information Society, will be held in Milwaukee, Wisconsin, Thursday evening October 2nd through Saturday, October 4th, 1980.

PARTICIPANTS

This organization will be of interest to cartographic information specialists, map librarians, cartographic archivists, cartographers, earth scientists and computer specialists, remote sensing experts and any other professional seriously interested in improving access to cartographic information.

OBJECTIVES

The Cartographic Information Society will be an independent, cross-disciplinary, national association. Its purpose and objectives are to:

- Promote communication, cooperation among the producers, disseminators, and users of cartographic information; and to promote and coordinate activities with all other professional organizations and institutions involved in cartographic information.
- Promote graphicacy and improve understanding of cartographic materials through education.
- Promote and coordinate the acquisition, preservation, and automated retrieval of all types of cartographic material.
- Influence governmental policy on cartographic materials and cartographic information.

PROGRAM

The program for the organizational meeting in Milwaukee will include an opening hospitality evening (featuring Milwaukee Gemütlichkeit); noted speakers; working sessions to formally organize the society; tours of Milwaukee and the surrounding area; and a featured tour of the American Geographical Society Collection in the Library of the University of Wisconsin--Milwaukee.

REGISTRATION/MEMBERSHIP

Pre-registration for the Milwaukee meeting will cost $35.00 if the registration is postmarked prior to Friday, September 5th. Registration at the meeting or after September 5th will cost $45.00. Registration for the Milwaukee meeting will include the first year membership in the Cartographic Information Society. A separate annual membership for those who can't attend the Milwaukee meeting will be $25.00.

For a registration brochure or further information contact:

Cartographic Information Society
143 Science Hall
University of Wisconsin--Madison
Madison, WI 53706
(608) 262-3065
NEWSLETTERS

SUR/VIEW, the Newsletter of the Wisconsin Geological & Natural History Survey, is a new, semiannual publication of the W.G.& N.H.S. It will report on the Survey's activities and related earth resources news. Each fourth issue will be expanded to include the Survey's biennial report. To obtain a free subscription contact Alex Zaporozec, Editor, Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706.

TO THE POINT is a Wisconsin Department of Natural Resources newsletter on federal and state water grant programs. Contact Paulette Harder, Director, DNR Bureau of Water Grants, 101 S. Webster St., Madison, WI 53702.

W.S.D.C. NEWS is a source of information on census activities, data and related material for Wisconsin. It is a free service of the Wisconsin State Data Center. Contact Dodie Flash, WSDC, Applied Population Lab, 1450 Linden Drive, Madison, WI 53706. (see article p. 10)

COMING IN OCTOBER

Automated cartography and land records project....Developmental 1:100,000 county base mapping project.......report on D.N.R. wetlands mapping......
a special issue devoted to remote sensing and LANDSAT imagery..plus all standard features you've grown accustomed to............................

BULLETIN MISCELLANY

The response to our updating our mailing list continues to be good. The Editor sincerely thanks all who took the time to respond. Again with this issue we are sending a quarter of the Mapping Bulletin by first class mail. If this Bulletin is the first you've received in a long time, it means we do not have an accurate address for you. We would appreciate it if you would notify us of your new address or ask to have your name removed from our mailing list. The response to the April issue resulted in 27 address changes.

Color paper remains somewhat difficult to obtain at our copy center. Therefore, this volume of the Bulletin will not be consistent in color as have previous years'. Variety is the spice of life....