



WISCONSIN MAPPING BULLETIN

Volume 3 No. 4 October 1977

INFORMATION ON CARTOGRAPHIC ACTIVITIES AND
AERIAL PHOTOGRAPHIC COVERAGE IN THE STATE
OF WISCONSIN; PUBLISHED QUARTERLY BY THE
STATE CARTOGRAPHER'S OFFICE, UNIVERSITY OF
WISCONSIN, 144 SCIENCE HALL, MADISON, WI 53706.

PHOTO-MOSAIC SOIL MAP

The Photo-Mosaic Soil Map of Wisconsin is a composite of a photographic image and a soil map. The photographic image shows major natural and cultural features at a scale of 1:1,000,000. The distribution of 26 major soil landscapes is indicated by boundaries and numerical symbols. The photo-mosaic soil map does not show bedrock patterns, soil test values, relative land values, and some other soil-related landscape properties. The accompanying small state maps give some of this information presented in forms adapted from a variety of published sources.

This publication is available to Wisconsin residents from county Extension agents. It is available to out-of-state purchasers from the Agricultural Bulletin Building, 1535 Observatory Drive, Madison, WI 53706. Order by the serial number A2822-1 and its title. The cost is \$1.50 plus postage. The map is also available from the Wisconsin Geological and Natural History Survey, 1815 University Ave., Madison, WI 53706 (608) 263-7389.

MAP SALES NUMBER CHANGES ONCE AGAIN

Back in April 1976 the Bulletin noted the use of a separate telephone number for Map Sales at the Wisconsin Geological Survey. A new phone system has been installed and subsequently the Map Sales number has been changed. The new number is (608) 263-7389. The general number remains the same.



TYPES OF MAPS

A FREE FOLDER



To respond to those who request information about various maps produced by the Federal government, the U.S. Geological Survey has prepared a folder, Types of Maps, which lists selected types of maps and charts, the publishing agency, and the agency from which the maps may be obtained. Addresses of the agencies are also listed.

Copies of the folder Types of Maps are available free from U.S.G.S. National Cartographic Information Center, 507 National Center, Reston, VA 22092.

TOPOGRAPHIC MAP COVERAGE

Completion of Wisconsin's 1:24,000-scale (7½') topographic map coverage was discussed when representatives from the Mid-Century Mapping Center (MMC), U.S. Geological Survey, Rolla, MO met with the Wisconsin Topographic Mapping Committee on September 23, 1977 in Madison. Mr. Lawrence Borgerding, MMC Chief, and Mr. Earl Reynolds, MMC District Engineer, stated that U.S.G.S. had had some production problems in their "cartographic area" i.e., scribing and negative preparation, because of other production such as the 1:100,000-scale series for the Soil Conservation Service and the Bureau of Land Management (see Bulletin, v.3, no. 3, p.2 and the following article). Production plans for future authorization of 1:24,000-scale maps to complete state coverage by 1983 were discussed. The MMC representatives said that with the authorization of SIR (U.S.G.S. non-Co-op funding) in the northwestern part of the state (Grantsburg project) and the four 15' quadrangle areas near Sparta-Fort McCoy (Melrose, Millston, Sparta and Tomah) the total state was either authorized for 1:24,000 production or had "T" map copy available. "T" maps are 15' quadrangles (1:62,500) which were compiled from 7½' (1:24,000) manuscript copy.

With this commitment the total state is covered by one of three categories of 1:24,000-scale coverage:

- Category 1: 52%.... Published maps at 1:24,000-scale, 7½' topo quads
- Category 2: 33%.... Authorized for and in production at USGS, Rolla, MO, for publication by 1980 as 1:24,000-scale 7½' quads
- Category 3: 15%.... "T" maps, prepared at 1:24,000 scale, but published at 1:62,500 scale. A copy in monochrome at 1:24,000 scale is available from USGS, Rolla, MO




1:100,000 SCALE MAP UPDATE

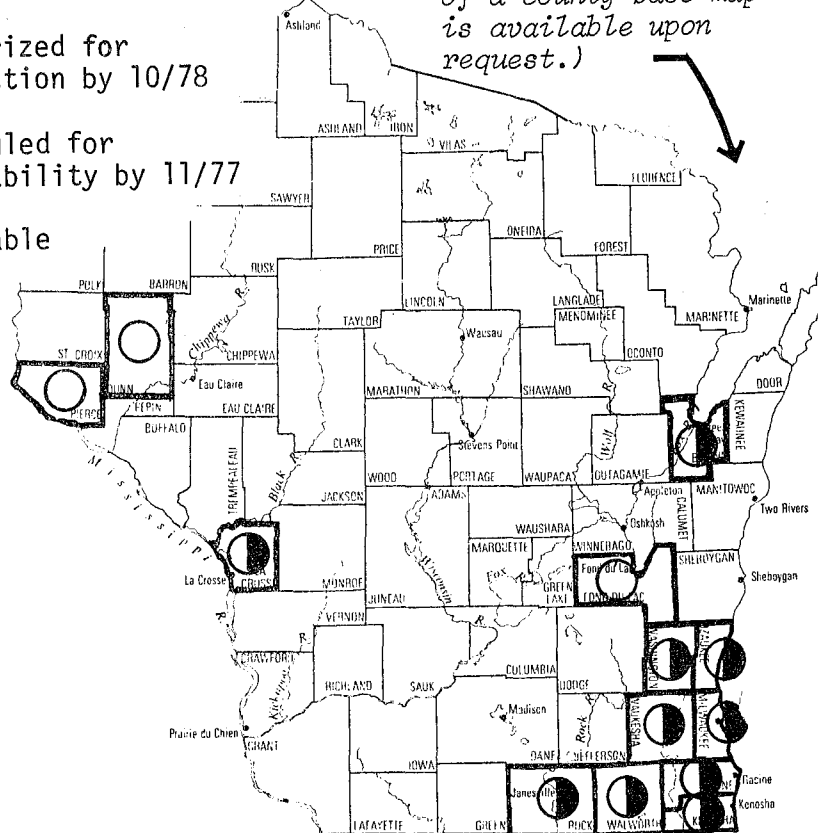
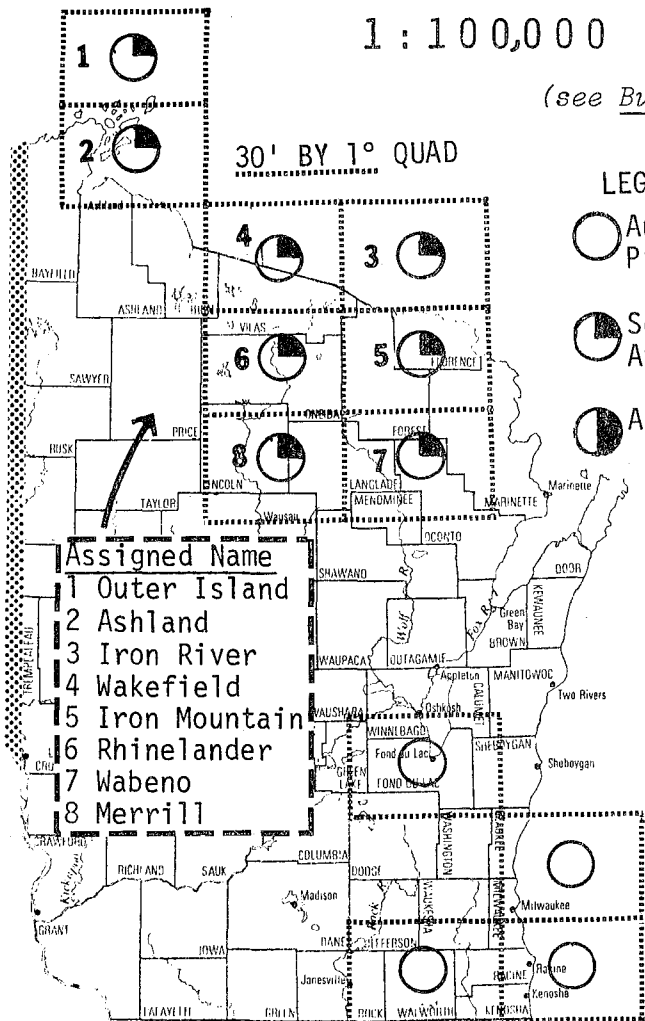
(see Bulletin, v.3, no. 3, p.2)

COUNTY BASE

(Note: a sample monochrome page-size copy of a county base map is available upon request.)

LEGEND

-  Authorized for Production by 10/78
-  Scheduled for Availability by 11/77
-  Available



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 \$1.50 each.

1 ELCHO 15' PLAN
 NE¼ Post Lake '73
 NW¼ Elcho '73
 SW¼ Kempster '73
 SE¼ Pearson '73

2 WINONA 15' TOPO
 NE¼ Dodge '73
 NW¼ Fountain City '72
 SW¼ Winona West '72
 SE¼ Winona East '72

3 CHILTON 15' TOPO
 NE¼ None
 NW¼ Hilbert '74
 SW¼ Chilton '74
 SE¼ Potter '74

4 KIEL 15' TOPO
 NE¼ Kiel '73
 NW¼ Marytown '74
 SW¼ St. Cloud '74
 SE¼ Elkhart Lake '74

5 KEWASKUM 15' TOPO
 NE¼ Cascade '74
 NW¼ Dundee '74
 SW¼ Kewaskum '74
 SE¼ Batavia '74

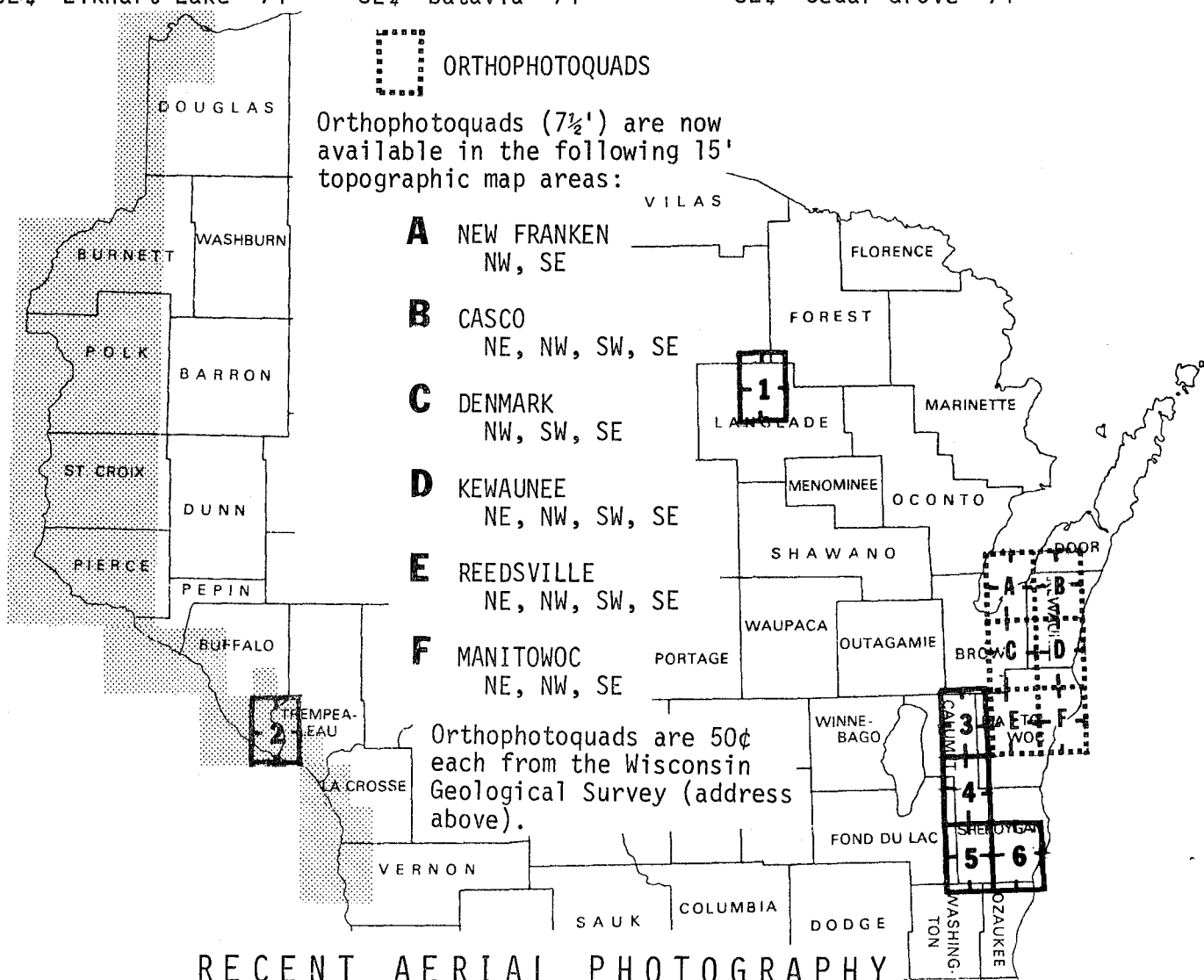
6 SHEYBOYGAN FALLS 15' TOPO
 NE¼ Sheboygan Falls '73
 NW¼ Plymouth South '74
 SW¼ Random Lake '74
 SE¼ Cedar Grove '74



ORTHOPHOTOQUADS

Orthophotoquads (7½') are now available in the following 15' topographic map areas:

- A** NEW FRANKEN
 NW, SE
- B** CASCO
 NE, NW, SW, SE
- C** DENMARK
 NW, SW, SE
- D** KEWAUNEE
 NE, NW, SW, SE
- E** REEDSVILLE
 NE, NW, SW, SE
- F** MANITOWOC
 NE, NW, SE



RECENT AERIAL PHOTOGRAPHY

In the spring of 1977 Minnesota acquired black-and-white, high-flight aerial photography at a scale of 1:80,000 (1" = 6,667') which overlapped parts of northwestern Wisconsin. The photography is centered on the 7½' quadrangles which are indicated by [shaded area] on the above map. For an index or further information contact: Mark Hurd Aerial Surveys, Inc., 345 Pennsylvania Ave. South, Minneapolis, MN 55426 (612) 545-2583.

AGRICULTURE AERIAL PHOTOGRAPHY CONSOLIDATED

The U.S. Dept. Agriculture has consolidated the aerial photographic holdings of its divisions. The photography previously held by the Soil Conservation Service (SCS) and the Forest Service (FS) is now housed in the new Agricultural Stabilization and Conservation Service (ASCS) facility in Salt Lake City. The prices for reproductions will be the same for all 3 agencies' photography. These prices have risen roughly \$1.50 to \$2.00 over 1976 prices. New order blanks will soon be available which will incorporate the A.S.C.S., S.C.S., and F.S. information. Until then all individual order blanks are being accepted. The new A.S.C.S. address is: Western Aerial Photography Laboratory
Agricultural Stabilization and Conservation Service
2222 West 2300 South Street
P.O. Box 30010
Salt Lake City, UT 84125
(801) 524-5856 (remained the same)

U. S. FOREST SERVICE, MILWAUKEE

The Geometronics section of the U.S.D.A. Forest Service, Eastern Region in Milwaukee has a new phone number. It is (414) 291-3662. The purchasing of Chequamegon and Nicolet National Forest photography is now handled by the new A.S.C.S. Aerial Photography Laboratory mentioned above.

COUNTY REAL PROPERTY LISTERS ASSOCIATION

During September 14 through 16, 1977, the state's county real property listers held their annual convention at Rhinelander, Wisconsin. On the afternoon of the 14th, Art Ziegler, State Cartographer, gave a presentation on current mapping activity of the state and held a mapping exercise for those present. A draft advance copy of a mapping chapter being prepared for insertion in the Tax Lister's Handbook was distributed. Final publication of this information circular is planned for March 1978. A few copies of the advance draft are still available from the State Cartographer's Office.



FARMLAND PRESERVATION ACT 1977

This Act, Chapter 91 of the Wisconsin Statutes, requires that the state Dept. of Agriculture, Trade and Consumer Protection Agency undertake a program of mapping the state's farmland which should be considered for preservation by local government. Specifically, section 91.05 requires the department "to prepare or cause to be prepared" maps of the state's good farmland. The Legislature appropriated \$200,000 for the mapping program. The State Cartographer is assisting the department in the design aspects of the mapping program and future progress will be summarized in the Bulletin.

SURVEY PUBLICATIONS



A new list of publications is available from the Wisconsin Geological and Natural History Survey. Requests for a free copy of the 36-page Publications List, July 1977 should be directed to Map Sales, Wisconsin Geological Survey, 1815 University Ave., Madison, WI 53706 (608) 263-7389.

COMING EVENTS

AUTO-CARTO III

The 3rd International Symposium on Computer-Assisted Cartography (AUTO-CARTO III) will be held in San Francisco, CA at the St. Francis Hotel January, 16-21, 1978. The conference will be co-sponsored by the U.S. Geological Survey and the American Congress on Surveying and Mapping in cooperation with the American Society of Photogrammetry. CONTACT: Jim Chamberlain, U.S. Geological Survey, 345 Middlefield Rd., Menlo Park, CA 94025.

NINTH INTERNATIONAL CARTOGRAPHIC CONFERENCE

The Ninth International Cartographic Conference will be held from July 26 to August 2, 1978 at the University College Center of Adult Education in College Park, Maryland. The program and the exhibits will focus on five themes:

- Automation in Cartography
- Map Perception and Design
- Cartography in the Developing Nations
- Remote Sensing - Today and Tomorrow
- Ocean and Coastal Cartography

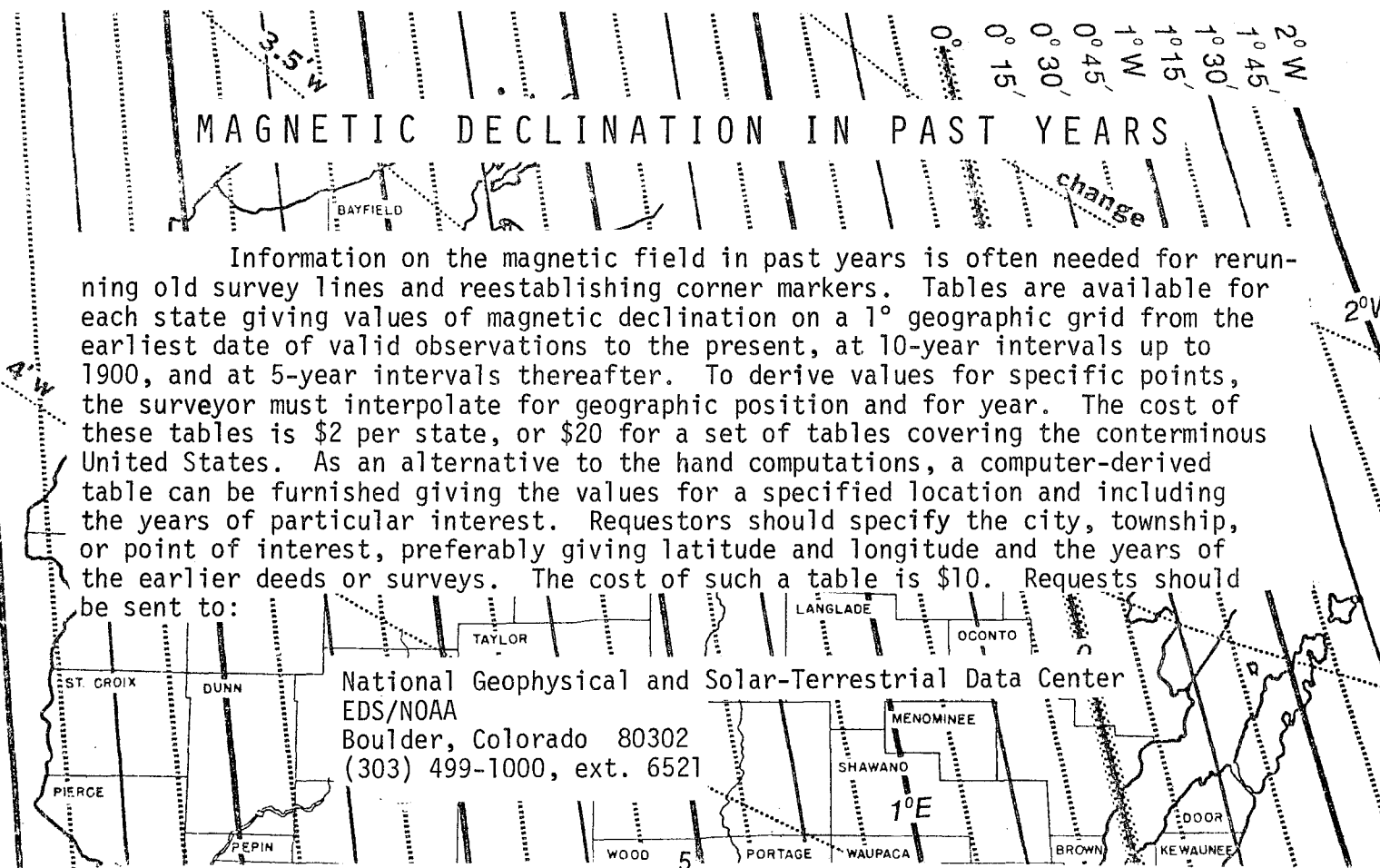
For additional information please write to the Chairman of the Organizing Committee, IX International Cartographic Conference, 210 Little Falls Street, Falls Church, VA 22046.



MAGNETIC DECLINATION IN PAST YEARS

Information on the magnetic field in past years is often needed for rerunning old survey lines and reestablishing corner markers. Tables are available for each state giving values of magnetic declination on a 1° geographic grid from the earliest date of valid observations to the present, at 10-year intervals up to 1900, and at 5-year intervals thereafter. To derive values for specific points, the surveyor must interpolate for geographic position and for year. The cost of these tables is \$2 per state, or \$20 for a set of tables covering the conterminous United States. As an alternative to the hand computations, a computer-derived table can be furnished giving the values for a specified location and including the years of particular interest. Requestors should specify the city, township, or point of interest, preferably giving latitude and longitude and the years of the earlier deeds or surveys. The cost of such a table is \$10. Requests should be sent to:

National Geophysical and Solar-Terrestrial Data Center
EDS/NOAA
Boulder, Colorado 80302
(303) 499-1000, ext. 6521

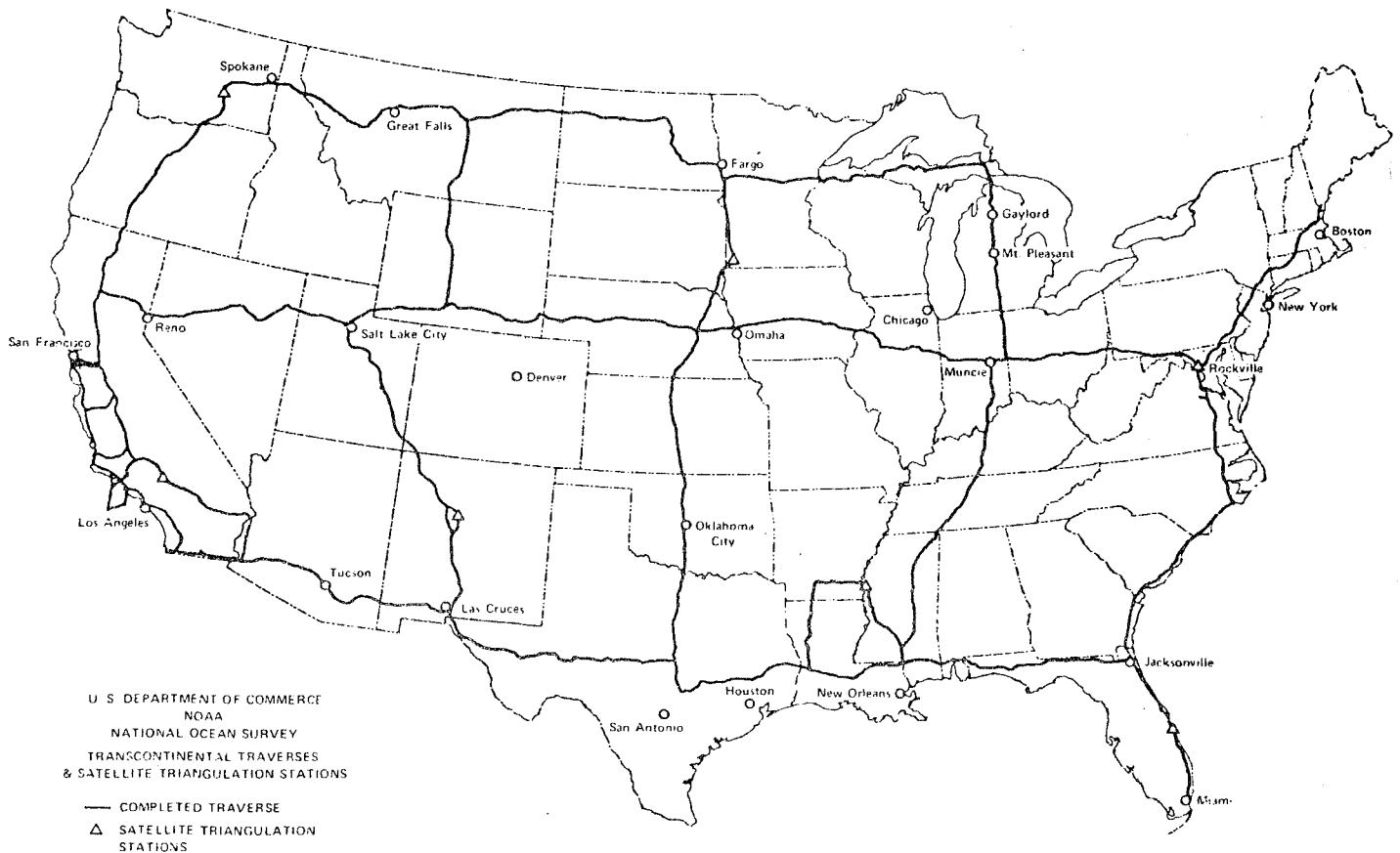


NATIONAL SURVEY NETWORK UPGRADED

The recently completed transcontinental survey to upgrade the national network of horizontal control, carried out by the National Ocean Survey's Office of National Geodetic Survey, is the basis for all other surveying in the continental United States. Made possible by the use of electronic distance-measuring equipment, and under way for a 15-year period, the survey is described by some experts as the most accurate of its size ever achieved.

Known as the High-Precision Transcontinental Traverse, the project results in accurate connections to a common reference system, or in establishing the control for such a connection. The traverses, designed to provide a multi-purpose fundamental network accurate to 1:1,000,000, were employed in scaling the worldwide and continental satellite networks. The completed survey will provide data for testing measuring systems, for detecting and evaluating long-term crustal movements, and for a variety of other surveys.

The high precision traverse crosses northern Wisconsin, entering north of Dairyland in Douglas County and leaving north of Winchester in Vilas County. The Office has on file the unadjusted field computations of the geographic positions of the stations involved.



THE WISCONSIN MAPPING BULLETIN IS DISTRIBUTED FREE OF CHARGE BY REQUEST.
ARTICLES MAY BE REPRODUCED WITHOUT PERMISSION PROVIDED ACKNOWLEDGEMENT IS GIVEN.
ANY COMMENTS OR CORRECTIONS SHOULD BE SENT TO THE STATE CARTOGRAPHER'S OFFICE,
144 SCIENCE HALL, UNIVERSITY OF WISCONSIN, MADISON, WI 53706 (608) 262-3065.
A.L. ZIEGLER, STATE CARTOGRAPHER C.M. REINHARD, EDITOR