## WISCONSIN MAPPING BULLETIN



Vol. 14 No. 1 January 1988

QUARTERLY PUBLICATION OF THE STATE CARTOGRAPHER'S OFFICE PROVIDING INFORMATION ON LAND RECORDS AND MAPPING SCIENCES IN THE STATE OF WISCONSIN

#### **OSHKOSH CONFERENCE**

The Education Committee of the Wisconsin Land Information Coalition (WLIC) is in the final planning stages for the Land Information Conference on February 25 & 26, 1988 at the Radisson Hotel in Oshkosh, WI.

At right and on the reverse side is the preliminary agenda with the speakers that have been confirmed at press time of the Bulletin. It also should be noted that on Thursday evening (7:00 p.m.) and Friday morning (9:45 a.m.) time is being allocated for professionals of various disciplines to meet and prepare positions to present to the WLIC at the 11 a.m. closing session. The staff of the WLIC is extremely interested in receiving proposals from the land records community on direction and goals to pursue in achieving the recommendations of the Wisconsin Land Records Committee.

On page 3 of this <u>bulletin</u>, is a list of sponsoring organizations of this conference. The Education Committee and the staff of the WLIC appreciate their support.

## EXPANDED PRELIMINARY CONFERENCE AGENDA

#### WISCONSIN LAND INFORMATION COALITION (WLIC) 1988 CONFERENCE PROGRAM

TIME

TOPICS

Thursday, February 25

- 9:00 -10:00 REGISTRATION; Informational Displays by Sponsoring Associations
- 10:00-10:30 Welcome and Introduce Conference Particulars by WLIC Staff
- 10:30-11:30 Modern Land Information
  Systems Opportunities and Challenges
  "Challenge the Conference
  Participants" Keynote Speaker is DR.
  PAUL ZWICK, Assistant Director,
  Geographic Planning Information
  Center, University of Florida,
  Gainesville, FL.
- 11:45- 1:15 LUNCH (in registration fee)
  "State-of-the-State" Presentation:
  review of WLRC's charge, process,
  conclusions, status and the strategy
  presently being pursued.

PROF. JAMES CLAPP, chair, Wisconsin Land Records Committee; Director, Center for Land Information Studies, Institute for Environmental Studies, and chair, Department of Civil and Environmental Engineering, UW-Madison.

1:30 - 2:45 Examples of Developing Modern Land Record Systems, Wisconsin Public Service Corporation, MR. RON MOSNIK City of Milwaukee, MR. WILLIAM HUXHOLD, Director, Electronic Data Services Dept., and MR. RANDY GSCHWIND, Dept. of City Development. Wisconsin Dept. of Tranportation, MR. RONALD SCHAEFER, Management Information Specialist.

Examples will review:

- methods and procedures
- problems and solutions
- those individuals involved
- steps/obstacles incurred
- current and future applications
- recommended do's and don't's

#### **CONCURRENT SESSIONS**

3:00 - 4:00 Four Tracks

Track: GEOGRAPHIC INFORMATION SYSTEM

Topic A: Introduction to GIS URISA speakers: MR. WILLIAM HUXHOLD, MR. RANDY GSCHWIND,

MR. RICHARD ALLEN, City of

Milwaukee

Track: GEODETIC CONTROL

Topic B: Dane County

Robal Positioning System PROF. ALAN VONDEROHE, Dept. of Civil and Environmental Engineering, UW-Madison.

Track: PARCEL MAPPING

Topic C: Geographic Information System vs Mapping CAD

Operation

DR. PAUL ZWICK, University of

Florida.

Track: SPECIAL APPLICATIONS

Topic D: Utility's

Requirements: presentation of two utilities' perspective

4:15 - 5:15 Four Tracks

Track: GEOGRAPHIC INFORMATION SYSTEM

Topic A: (Repeat of 3 P.M.)

Track: GEODETIC CONTROL

Topic B: (Repeat of 3 P.M.)

Track: PARCEL MAPPING

Topic C: (Repeat of 3 P.M.)

Track: SPECIAL APPLICATIONS

Topic E: Two part:

-Southeast Wisconsin Data Sharing Group; presentation

by member of group;

Thursday, continued

-Ad Hoc Committee on Digital Data Survey of Wisconsin; presentation by member of committee

5:30 - 7:00 General Reception (cash bar) Informational Displays by Sponsoring Associations

7:00 DINNER (on your own)
Professionals of various disciplines
may schedule dinner meetings to
conduct association business or draft
position for conference session at
9:45 a.m. Friday.

Friday, February 26

#### **CONCURRENT SESSIONS**

8:30 - 9:30 Four Tracks

Track: GEOGRAPHIC INFORMATION SYSTEM

Topic F: GIS and Mapping, DR. PAUL ZWICK, University of

Florida and other participants

Track: GEODETIC CONTROL

Topic G: Review of Geodetic Control Alternatives, Representatives of Wiscon's

Society of Land Surveyors, Wisconsin County Surveyors Association, and Southeastern Wisconsin Regional Planning

Commission

Track: PARCEL MAPPING

Topic H: <u>Statewide Parcel</u> <u>Numbering System</u>, **MR. JEFF BLUSKE**, President, Wisconsin

Real Property Listers

Association.

Track: SPECIAL APPLICATIONS

Topic I: Recent Innovations

in Laser/Disc Records

Storage, MR. CHRIST G. ELLIS,

IMNET Corp.

9:45 -10:45 Professional Focus Group Meeting - professionals of

various disciplines meet to:

1. Review WLRC Strategy

2. Develop recommendations for WLIC

11:00-12:00 General Closing Session:

Review of Focus Group's recommendations

Indentify future direction for WLIC

• Wrap-up conference

#### OSHKOSH CONFERENCE SPONSORS

American Congress on Surveying and Mapping (Southern Lake Michigan Section)

American Society of Photogrammetry and Remote Sensing (Western Great Lakes Region)

Automated Mapping/Facilities Management International (Wisconsin Regional Chapter)

State Cartographer's Office

★ Urban and Regional Information Systems Association (Wisconsin Chapter)

Wisconsin Register of Deeds Association

Wisconsin Association of Assessing Officers

Wisconsin Society of Land Surveyors

Wisconsin Real Property Listers Association

Wisconsin County Planning Directors Association

Wisconsin County Surveyors Association

Wisconsin County Code Administrators

(as of November 1987)

★special thanks is due to WisURISA for supporting the formation of the Wisconsin Land Information Coalition.

#### LANDSAT 6 SENSOR PAYLOADS

The Earth Observation Satellite Company (EOSAT) reports that the Landsat 6 earth remote sensing satellite scheduled for launch in early 1991 will carry three sensor payloads. These are: 1) the Enhanced Thematic Mapper (ETM) sensor with seven multispectral bands and 15-meter panchromatic capability, 2) a new Thermal Infrared (TIR) capability, and 3) the Sea-viewing Wide Field Sensor (SeaWiFS) for ocean color and temperature data.

The Enhanced Thematic Mapper (ETM), developed by Hughes Santa Barbara Research Center, is the primary sensor for the Landsat 6 mission. It incorporates the existing multispectral capability of the Landsat 4/5 Thematic Mapper, and adds a 15-meter panchromatic capability in the .5 - .9 micron range. Added features will result in more efficient data handling capability, in particular simultaneous band collection and data recording.

## ENHANCED THEMATIC MAPPER SPECTRAL BANDS

BAND #	BANDS (µm)	GROUND RESOLUTION (METERS)
Pan 1 2 3 4 5 7	0.50 - 0.90 0.45 - 0.52 0.52 - 0.60 0.63 - 0.69 0.76 - 0.90 1.55 - 1.75 2.08 - 2.35 10.4 - 12.5	13 X 15 30 30 30 30 30 30 30 30 120

A proposed modification to the ETM sensor is the addition of the Thermal Infrared (TIR) capability. Geoscientists and specialists in Hydrology and Vegetative Sciences have defined commercial and research applications for TIR which include evaluation of groundwater resources, global volcanic activity, snow cover, flood and erosion, and crop yield.

## THERMAL INFRA RED (TIR ) OPTION (Modification to ETM)

BAND NO.	IFOV	BANDWIDTH (µm)	NE∆T (K)*
M	120	3.53 - 3.93	0.29
8	60	8.20 - 8.75	0.48
9	60	8.75 - 9.30	0.47
10	60	10.20 - 11.0	0.54
11	60	11.0 - 11.8	0.57

\*Net Equivalent Delta Temperature

(continued next page)

#### LANDSAT PAYLOADS, continued

The Sea-viewing, Wide-Field-of-View Sensor (SeaWiFS) combines the best attributes of data gathered by the Coastal Zone Color Scanner (CZCS) (operated 1978-1986) and the Advanced Very High Resolution Radiometer (AVHRR), which is operated from a series of National Oceanic and Atmospheric Administration (NOAA) satellites.

#### Sea-WiFS BASELINE SPECTRAL BANDS

BAND	BAND Center	BAND Width	PURPOSE
1 2	443nm 500nm	20nm 20nm	Low chlorophyll Other Pigments
3	565nm	20nm	Baseline Chlorophyll
4	665nm	20nm	Susburface Scattering
5*	765nm	40nm	Atmospheric correction
6	865nm	44nm	Atmospheric correction
7	11um	1.0um	Sea-surface temperature
8	12um	1.0um	Sea-surface temperature

<sup>\*</sup>Blocked from 759 to 770 nm to minimize interference from the oxygen absorption band,

The combination of chlorophyll and temperature data led to expanded knowledge in oceanographic research, but a replacement system must be found for the inoperative CZCS. The data derived from coregistered ocean color and temperature information has many commercial and scientific uses. Large shipping vessels can plot counter-current movement: commercial fishing vessels can locate boundary regions between warm waters and cool upwellings---areas which harbor large quantities of marine life. Researchers are interested in SeaWiFS data as an extremely valuable tool for understanding the dynamics of the oceans; the frequency of current movement; where, when and by what amount the ocean's temperature changes; how the ocean's color relates to its carrying capacity for marine life, and other as yet undiscovered uses.

(source: Landsat Data User Notes, Sept. 1987)

#### **FRIM REMOTE SENSING CONFERENCE**

The Environmental Research Institute of Michigan has scheduled its Sixth Thematic Conference on Remote Sensing for Exploration Geology to take place May 16-19, 1988, at the Westin Galleria Hotel in Houston. TX. The conference will focus on remote sensing applications, technology, and economics. As in past conferences in this series, the meeting will seek to bridge the gap between geologists and geophysicists engaged in exploration for energy and mineral resources and research scientists from government agencies and academia. The technical program will be oriented toward practical applications of remote sensing for mineral and hydrocarbon exploration. A concerted effort will be made to gather papers that address cost benefits.

Specific topic areas include:
 Introduction to Remote Sensing:
 Technology and Data Availability
 Frontier Exploration
 Exploration in Mature Basins
 Offshore Applications
 Advanced Image Processing
 Remote Sensing for the 1990's

To obtain a pre-registration form or other information, contact: Judith A. Stech, Exhibits Coordinator ERIM, Thematic Conference, P.O. Box 8618, Ann Arbor, MI 48107-8618, phone 313/994-1200 ext. 3577.



## STATUS OF GEOLOGIC MAPPING - UPDATE WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY

#### LEGEND

- ♣ Aeromagnetic
- ♦ Bedrock
- ▲ Bedrock Topography
- Mineral Resources
- Pleistocene (Glacial)
- Soil Attenuation Potential

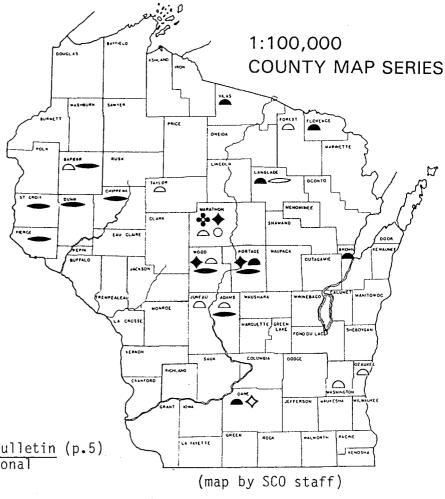
Dates of publication will vary.

△ An unfilled symbol indicates a map in work.

Map prices may vary. For additional information contact:

Wisconsin Geological and Natural History Survey 3817 Mineral Point Road Madison, WI 53705 608/263-7389.

See the April, 1987 edition of the <u>Bulletin</u> (p.5) for the status of the 1:250,000 Regional Geological Map Series.



#### PUBLICATIONS OF INTEREST

## MAPS COMMEMORATE U.S. CONSTITUTION BICENTENNIAL

To commemorate the bicentennial of the signing of the U.S. Constitution, the U.S. Geological Survey has issued a colorful map sheet titled "Maps of an Emerging Nation" illustrating the territorial growth of the United States during the past two centuries. One side of the sheet has a series of 14 maps portraying the nation's territorial development and corresponding national flags for selected years from 1775 to the present. The reverse side has a reproduction of the second edition of a map produced by Abel Buell in 1784 that shows the United States as it existed about the time the Constitution was written. The original Buell map was the first map of the United States produced by an American.

Copies of the USGS map sheet can be purchased for \$2.50 each from the U.S. Geological Survey, Map Distribution, Box 25286, Federal Center, Denver, CO 80225. Orders should specify the map name, "Maps of an Emerging Nation," and include checks or money orders payable to the Department of the Interior-- USGS. Each order for less than \$10 must include an additional \$1 for postage and handling.

(source: University of Illinois Map & Geography Library biblio newsletter, 1987 No. 4)

#### PUBLICATIONS OF INTEREST, continued

#### WISCONSIN RIVER SCENERY

A 53-page booklet titled Managing Scenic Beauty Along the Lower Wisconsin River has been published by the UW-Madison's Department of Landscape Architecture. The booklet evaluates legal mechanisms that might be used to protect the river's scenery and recommends a plan for doing so which complements a proposal by the Wisconsin DNR to establish a state forest along a 92-mile stretch of lower Wisconsin River.

For additional information contact the IES Office of Publications, Information, and Outreach, 550 N. Park Street, 15 Science Hall, UW-Madison, Madison, WI 53706, phone 608/263-3185.

(source: IES News, Nov. 1987)

## ASPRS CONFERENCE PROCEEDINGS AVAILABLE

The American Society for Photogrammetry and Remote Sensing announces publication of GIS '87 -San Francisco, containing papers presented at the 1987 international conference held in October. This two-volume, 756-page set introduces the latest technology for novice and experienced users and implementors of geographic information systems. Topics range from justification and selection of a GIS to development and implementation of the system in place. Price: \$70; members: \$40. Stock No. 628D-2.

Proceedings of the Conference and Workshop on Remote Sensing Applications: Commercial Issues and Opportunities for Space Station has been published by ASPRS and contains

23 papers presented at the June 3-5, 1986 conference held in Denver, CO. Organized by the Geosat Committee, NASA, NOAA, EOSAT, ITD/SRSC and ASPRS, this conference reviews remote-sensing planning from the end-user's viewpoint. The Proceedings provide useful input to international government and industry planners in their efforts to continue developing civilian satellite remote sensing worldwide.

In addition to the papers presented, working group sessions were held on information systems, renewable resources, nonrenewable resources. oceans and atmospheres, and valueadded service industry. Summary Matrices of each working group and a list of acronyms are also included in this 169 page, soft-cover book. Price: \$40; members: \$25. Stock No. 628V-1. Each of these publications can be ordered from ASPRS, 210 Little Falls Street, Falls Church, VA 22046. Bulk order discounts and review copies are available upon request.

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INFORMATION ON THE ACSM ANNUAL MEETING, to held this year in St. Louis, will be sent out in December. Members should receive the information by mid-January. Gilbert Grosvenor, chairman of the board of the National Geographic Society, will be the keynote speaker. The convention dates are March 13-18, 1988.

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

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

# BELOW ARE REGISTRATION FORMS FOR THE WISCONSIN LAND INFORMATION CONFERENCE DESCRIBED ON PAGES 1&2 OF THIS BULLETIN:

----SEPARATE HERE FOR HOTEL REGISTRATION --

	Radisson Hotel At Park Plaza One North Main Street Oshkosh, Wisconsin 54901 ORGANIZATION Wisconsin Land Information	ROOM RATES  Single: std. \$49.00 gov't. \$39.00 Double: std. \$62.00 gov't. \$49.00  I.D. required for government rates. IF RATE REQUESTED IS NOT AVAILABLE, NEAREST AVAILABLE RATE WILL BE ASSIGNED.
	FUNCTION 1988 Conference	DATES February 25th and 26th
	ALL REQUESTS FOR THE ABOVE GROUP MUST BE RECEIVED BY Janu	uary 25, 1988
	Please reserve accommodations for	Print or Type
	NAME	COMPANY
	ADDRESS	
		STATE ZIP CODE
	PREFERRED ACCOMMODATIONS	NO. OF PERSONS
	SIGNATURE	PHONE NUMBER
	MONTH DAY YEAR ARRIVALTIME MONT	CHECK IN TIME 3:00 PM
	ARRIVAL DATE	DEPARTURE DATE
	ACCOMMODATIONS WILL NOT BE CONFIRMED WITHO  AMEX OR DINERS CLUB CREDIT CARD # TO GUARANTE	UT A CHECK FOR THE 1st NIGHT'S DEPOSIT OR USE YOUR EYOUR RESERVATION. YOU WILL BE CHARGED FOR THE 1st
	NIGHT IF RESERVATIONS ARE NOT CANCELED 24	HOURS PRIOR TO ARRIVAL.
	MAKE CHECK OR MONEY ORDER PAYABLE TO RADISSON HOTEL A	CLUB I VISA MASTERCARD EXPIRATION DATE
	The state of the s	TAIN PEACH, DO NOT SEND CONNENCT.
	SEPARATE HERE FOR C	ONFERENCE REGISTRATION
* *		
ADVANCE	CONFERENCE REGISTRATION	WISCONSIN LAND INFORMATION COALITION
94	"Wisconsin Land Records Moderniz	ation, Focus on Implementation"
	February 25	•
name:		To assist the conference
addroc		committee please select vour

affiliation:

CONFERENCE FEE: \$25.00 (includes Thursday's lunch and break refreshments)

ake check payable to WIS URISA, WLIC conference and mail before January 15, 1988 to:

WLIC Land Records Conference ATTN: William Nantell

Donohue Intelligraphics, Inc.

600 Larry Court Waukesha, WI 53186 committee, please select your Educational Presentation Topics below: (listed on reverse side) Thurs. Thurs. 3:00 pm 4:15 pm 8:30 am Topic Topic Topic F BC Ġ Н Select one topic from each time period.

(staple or tape here)

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