Western Association of Map Libraries

"... to encourage high standards in every phase of organization and administration of map libraries..."
The **Information Bulletin** is published three-times-per-year by the Western Association of Map Libraries, but opinions expressed herein do not necessarily reflect an official position of the Association.

Membership in WAML is open to any individual, institution, or business interested in furthering the Purpose of the Association, which is "to encourage high standards in every phase of the organization and administration of map libraries." Membership checks should be sent to Production & Subscription Manager shown below. Checks payable to "WAML."

**Membership Dues:** Individual Members residing in the Principal Region, may attend meetings, serve as an Officer, vote, and receive the **Information Bulletin** and announcements of meetings. $15.00 per year.

**Principal Region**

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**Associate Members** reside outside the Principal Region. They may attend meetings, serve on committees, and will receive the **Information Bulletin** and announcements of meetings. $15.00 per year.

**Lifetime Individual Membership** is open to individuals only, for a onetime payment of $200. In addition to full Membership, all issues of the **Information Bulletin** and all Occasional Papers will be sent as published.

**Institutional Members** are commercial firms or educational organizations. The institution may designate one of its staff as its Representative. The Representative has all rights as Individual Members, but may not hold office. The Institutional Member will receive one copy of each issue of the **Information Bulletin** and each Occasional Paper issued during the year of membership. $35.00 per year.

**Subscriptions** to the **Information Bulletin** are $20.00 per volume-year; three issues per volume-year: November, March, June. $3.00 post out of US.

MEMBERSHIPS AND SUBSCRIPTIONS ARE AVAILABLE ON A FISCAL YEAR/VOLUME YEAR BASIS ONLY. Mid-year joiners/subscribers will receive back-issues for that year. The Fiscal Year/Volume Year is July 1st through June 30th.

Back issues of the **Information Bulletin** are available for $10.00 per volume or portion thereof from Subscription Manager. All issues available.

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US ISSN 0049 — 7282

**Editorial Staff:**

**LC # 72-625238**
WESTERN ASSOCIATION OF MAP LIBRARIES INFORMATION BULLETIN

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Editor's Page

Leaving the comfort of Stan Stevens' Information Bulletin editorship to assume it myself brings home its consequences. In order to make the transition as imperceptible as possible, for instance, I've had to change my music listening habits. Since I work in the back yard at a picnic table, I invested $18 in a pair of 3-way stereo speakers at Mark the Shark's (these were quite a bit cheaper than the ones on special at Mad Jack's). If Stan did so admirably with Bach, it seems all the more appropriate that I Bach, out back. This, then, is the back-to-Bach issue of the IB.

The second thing brought home by editing this issue (and, oh Lord!, the next 14) is that while I enjoy writing and enjoy reading, I do not enjoy reading my own writing. Phil Hoehn made this clear at the Fresno meeting, reported on in this issue, when he reminded me of some item I had written, then forgotten about, in "Microcartography". However, I will enjoy reading anything readers might care to submit.

The first of them is Pat Moore's "A Selected Bibliography and Directory of State Mapping Advisory Committees", which serves as an introduction to Larry Edwards' "The State Mapping Advisory Committee -- its basis and function in major public mapping programs," a talk he gave at the Seattle meeting last Spring.

Another meeting presentation is recorded in D.L. Morgan's "Life Blood of the San Joaquin," presented at the Fall meeting in Fresno this October. It is an example of how maps can be integrated into an applied lecture to better appreciate mapped phenomena in a local context. Appropriately enough, Fresno supplied the full spectrum of weather for our meeting, as if on cue, to make this talk more relevant.

The new sections I am added to the IB reflect my own interests and concerns. These will remain bulletin boards unless and until someone takes them on themselves to upgrade them into regular columns. These include "Software", which first appeared in the last issue, and seeks to cover relevant information on microcomputers.

"Names", written to keep us in touch with new gazetteers, geographic dictionaries and related literature. For instance, it recently came to my attention that the U.S. Board on Geographic Names has no current means of distributing its Foreign Names Decisions. If practical, we will use the pages of the IB to fill this need until something more appropriate can be arranged, so we do this issue with FIPS 10-2.
In upcoming issues, I would like to add bulletin boards on Pacific Basin and Hemispheric mapping, to neglect strong interest in these areas by many Principal Region members.

Also planned is a series of data sheets on large-scale urban mapping worldwide. This information is not readily available now, although it is accessible. I used the IB to publish the San Diego data some time ago, and could use equivalent information for all major world cities. The importance of such knowledge to researchers is rising as populations concentrate. Members can contribute large-scale city mapping data on an ad hoc basis, allowing us to accumulate alphabetical information binders comparable to those the IB has already supplied on quadrangle indexes to geologic mapping. The geologic indexes have proven very useful and I will try to continue them until we complete coverage of the Principal Region, and I would be only too happy to publish such indexes for other states if they are volunteered (see New Mapping of Western North America -- Wyoming -- for a state begging to be finished). When complete, such projects would make excellent Occasional Papers.

Finally, this is the last IB for 1984, and I completely forgot to assemble a list of cartographic calendars. I was reminded just now by an announcement for Flying Camera 1985, one of the most beautiful. It is available for $19.50 from International Mapping Unlimited, 4343 39th St., N.W., Washington, D.C. 20016. For a more traditional decor, Abbeyville Press just published "Early Maps and Charts" for $7.95 (ISBN 0-89659-472-6), available from Ingram Book Company, P.O. Box 17266, Nashville, TN 37217 (their 1985 calendar catalog is available free and includes various NASA-based calendars). Canada's National Map Collection calendar is again available from Firefly Books, 3520 Pharmacy Avenue, Scarborough, Ontario M1W 2T8, for $7.95. Last but not least, "Ancient Maps and Prints of the Holy Land Calendar 1985", can be ordered from Terra Sancta Arts, P.O. Box 10009, Tel Aviv, 61 100, Israel, for $12 plus $5 p+p.

Larry Cruse
Bench Marks!

* Brent Allison, Associate Member, has been appointed Map Acquisitions Librarian, Map Division, The Research Libraries, New York Public Library. His appointment was announced in Jan. 1984 by Alice Hudson, Chief, Map Div. NYPL, the same month he graduated from the Graduate School of Library and Information Science, University of Illinois-Urbana.

* Jeremiah B. Post, frequent contributor to the WAML I.B., Free Library of Philadelphia, received the 1984 Honors Award from the Map and Geography Round Table of the American Library Association for his "outstanding contributions to map librarianship and to the Round Table."

* Joanne Perry, WAML Member, formerly at Oregon State Univ. in Corvallis, has been appointed Map Librarian at the Arizona State Library in Phoenix.

* Vlad Shkurkin, WAML Member, Publisher of Sanborn reprints, spoke to the Historical Society of New Mexico at its Apr. 27, 1984 Annual Conference, Taos, N.M., on the subject of "Fire Insurance Maps as Primary Historic Records".

* Eleanore E. Wilkins, one of the Charter Members of WAML, and host of its third meeting on March 16th 1968 at her U.S.G.S. Library in Menlo Park, has been honored with a Meritorious Service Award by the U.S. Department of the Interior.

Eleanore has been chief Librarian at USGS's Western Regional Center Library, Menlo Park, for over 25 years. The citation was made "in recognition of her outstanding service in the field of geoscience librarianship". The USGS Library at Menlo Park is recognized as one of the world's outstanding geoscience libraries, and under her leadership the staff of the library has been cited for their outstanding public service to its users. WAML extends its collective Congratulations to Eleanore!

Rosanna Miller, WAML Member and host of the forthcoming meeting in Tempe, Arizona, where she is Head of the Map Collection, Arizona State University, spent the late spring of 1984 traveling in China with the Phoenix Art Museum Study Tour.

From Shanghai to Zian, transportation was by rail, and from Zian to Beijing by air. Rosanna also visited Hong Kong for several days at the conclusion of the tour. For your own protection and sanity, don't ask to see her slides; she has over 700.
WESTERN ASSOCIATION OF MAP LIBRARIES

Constitution & By-Laws

Compiled by Stanley D. Stevens

Reflecting all Amendments, July 1, 1967 - 1984

Having met on November 12, 1966 at the University of California, Berkeley, to consider the establishment of an association, and

Therefore the first meeting was called for San Francisco State College, San Francisco, on July 1, 1967,

The Constitution and By-Law are thereupon adopted, and the Western Association of Map Librarians is established, July 1, 1967.

The Constitution, except for the name of the Association, has served its Members for seventeen-years without major change. [The name of the Association was changed, ca. September 1969, to: W... A... of Map Libraries. The Office of Secretary-Treasurer was divided into two position. The amount of Dues has changed from time to time.]

The By-Laws have undergone Amendments on the following occasions:

September 1969; June 1973; March 25, 1982; April 7, 1984 (Dues).


The Constitution and By-Laws, as Amended through September 30, 1984, are compiled and published here for the convenience of WAML Members.

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CONSTITUTION

WESTERN ASSOCIATION OF MAP LIBRARIES

Article I NAME

The name of this organization shall be the Western Association of Map Libraries.
Article II  PURPOSE

The Purpose of the Association shall be to encourage high standards in every phase of the organization and administration of map libraries by:

A. Providing for the discussion of mutual problems and interests through meetings and/or publications.
B. Exchanging information on experiences, ideas, and methods.
C. Encouraging higher production standards of map manufacturers.
D. Establishing and improving standards of professional service in this field.

Article III  MEMBERSHIP

Sect. 1: Any individual, institution, or business concern interested in furthering the purpose of the Association is eligible for membership.

Sect. 2: Membership in good standing may be maintained only by payment of all dues and assessments levied by the Association.

Article IV  OFFICERS

Sect. 1: The Officers of the Association shall be as follows:

President
President-Elect (Vice-President)
Treasurer
Secretary

Sect. 2: Only individuals of the Association in good standing shall be eligible to serve as officers of the Association.

Sect. 3: The term of office for each of the Officers shall be for one year and begin on July 1st.

Sect. 4: Each Spring the President will appoint a three-member nominating committee. This committee will give the Secretary a slate of nominees for the election of officers. The Secretary will submit this slate to the Membership by mail ballot and will then notify the Membership of the result of the election.

Article V  EXECUTIVE COMMITTEE

Sect. 1: The business of the Association shall be conducted by the Executive Committee, composed of the Officers and the immediate past President. All their decisions will be reported at each general meeting.
Sect. 2: The ultimate authority on all matters pertaining to the Association rests with the general Membership, and any decision made by the Executive Committee is automatically subject to reconsideration by the Membership.

Article VI MEETINGS

Sect. 1: The Association shall hold general meetings at times and places selected by the Executive Committee after consultation with the Membership.

Sect. 2: Special Meetings of the Executive Committee, one of the Standing Committees, or any portion of the Membership may be held at any time, or in any region, as authorized by the Executive Committee.

Article VII QUORUM

Sect. 1: Decisions that require consent of the Membership shall be referred to all Members by mail ballot.

Sect. 2: Three members of the Executive Committee shall constitute a quorum of the Committee; however, wherever possible all members of the Executive Committee shall be consulted before decisions are taken.

Article VIII AMENDMENTS

Sect. 1: This Constitution may be amended by a majority vote of the Membership.

Sect. 2: Proposed Amendments must be submitted in writing to the Secretary at least one week before a general meeting. The amendments shall be read at the meeting. The Secretary shall be responsible for submitting the proposed amendments with appropriate explanatory comments to the Membership and any arguments for or against the amendments submitted by individual members.

Article IX BY LAWS

The Association may adopt By Laws which establish the detailed procedures necessary to carry out the provisions of the Constitution.

Article X DISSOLUTION

1. In the event a decision is made that leads to the dissolution of this Association, the assets remaining after all obligations have been paid, will be distributed by the Executive Committee or its successor to an organization exempt from taxation under section 501(c)(3) of the Internal Revenue Code of 1954 according to one of the following methods:
A. Donate the entire remaining assets, including title to its Copyrights, rents, and royalties, to the institution that then holds the Archives of the Association. That institution must agree to use the proceeds for the improvement and maintenance of the Archives of this Association, according to generally recognized archival practices, the ultimate objective being the preservation for research, and/or the distribution of information about the history of the Association.

B. If the institution then holding the Archives of the Association declines to accept the conditions herein enumerated, another institution will be sought that will accept the conditions.

C. If no institution accepts the maintenance of the Archives of the Association within six-months of the stated intent of dissolution, the assets will be distributed as follows:

D. The assets will be divided equally among all Institutional Members of the Association that are recognized by the Internal Revenue Service as not-for-profit organizations under section 501(c)(3). Each organization must agree to use the proceeds for the general welfare of its map collection.

2. After the decision for dissolution is made, before final distribution of its assets is made, if there are surplus copies of the Association's publications remaining as part of the assets, the Executive Committee, its successor, or the curator of the Archives, may distribute sets or individual copies to not-for-profit institutions to complete their holdings.

BY-LAWS

Bylaw 1: PRINCIPAL REGION

The following Provinces of Canada and States of the United States shall comprise the Principal Region for membership purposes:

Alberta        Arizona        Hawaii        Nevada        Utah
British Columbia California Idaho New Mexico Washington
Alaska         Colorado       Montana         Oregon        Wyoming

Bylaw 2: FISCAL YEAR

The fiscal year extends from July 1 through June 30. The fiscal year shall be the standard year for operation of WAML business, including the payment of Membership Dues, acceptance of Subscriptions to WAML publications, and rendering of financial statements.
Bylaw 3: OFFICERS

A. Eligibility for more than one term: No provision of Article IV of the WAML Constitution shall prohibit a member from standing for re-election as an Officer, providing that compliance with Article III, Section 2 is met.

B. Vacancies: The Executive Committee shall fill any vacancy by appointment of any Individual Member. The appointment shall extend for the duration of the fiscal year in which the appointment was made.

Bylaw 4: MEMBERSHIP CATEGORIES

A. Under the general eligibility requirements enumerated in Article III of the WAML Constitution, there shall be the following types of Membership:

1. Individual Members
   a. Definition: Individual Members are those persons residing within the Principal Region as defined by Bylaw 1.
   b. Rights of Participation: The following rights accrue to all Individual Members:
      (1) The right to serve as an Officer.
      (2) The right to vote on all matters put to the Individual Membership for decision.
      (3) The right to attend all meetings of WAML.
      (4) Automatic receipt of the Information Bulletin, announcement of meetings of WAML, mail ballots, and notification of all matters decided by the Executive Committee.
   c. Dues: Dues are $15.00 per year, payable upon presentation of a statement by the Treasurer.

2. Associate Members
   a. Definition: Associate Members are those persons who reside outside of the Principal Region.
   b. Rights of Participation: The following rights accrue to all Associate Members:
      (1) Attendance at all meetings of the Association.
      (2) Automatic receipt of the Information Bulletin.
      (3) Service on committees in an advisory capacity.
   c. The following rights do not accrue to Associate Members:
      (1) Receipt of mail ballots or the right to vote on any matter put to the Individual Membership for decision.
(2) Receipt of announcements of meetings, or other notifications [except as published in the Information Bulletin].

(3) The right to serve as an Officer.

d. Dues: Dues are $15.00 per year, payable upon presentation of a Statement by the Treasurer.

3. Lifetime Individual Members

a. Definition: This category is open to individuals only.

b. Rights of Participation: The following rights accrue to all Lifetime Members.

   (1) The same rights of participation enjoyed by Individual Members.
   (2) Automatic receipt of one copy of all WAML publications.

c. Dues: Dues are $200.00, payable in one single payment.

d. The Individual Membership may honor an individual by granting an Honorary Life Membership, and waiver of any Dues.

4. Institutional Members

a. Definition: Institutional Members are commercial firms or educational organizations.

b. Rights of Participation: The Institution may designate one of its staff to be the official representative for attendance at meetings. The official representative shall have all the rights of Individual Members, but shall not hold office.

c. Publications Received: Institutional Members shall automatically receive one copy of each issue of the Information Bulletin and each Occasional Paper.

d. Dues: Dues are $35.00 per year, payable upon presentation of a Statement by the Treasurer.

Bylaw 5: PUBLICATIONS

A. The publications of WAML shall be the Information Bulletin, and the Occasional Papers.

B. Subscriptions

1. The Treasurer will receive payment for subscriptions to the Information Bulletin, and/or the Occasional Papers, based on subscription rates set by the Executive Committee, and be responsible for supplying all the issues published during the term for which payment was accepted.
2. The Treasurer shall report to the Executive Committee at the close of the Fiscal Year on the Income and Expenses for all publications, the number of copies on hand, and the need to reprint portions of the publications. Copies of the report will be submitted to the Publications Advisory Committee.

C. Sales of Publications

1. The Treasurer shall receive payment for sale of copies of the Occasional Papers, and back issues of the Information Bulletin, based on rates established by the Executive Committee, and be responsible for supplying copies as ordered.

D. Publications Advisory Committee

1. Definition: There shall be a Publications Advisory Committee to advise the Executive Committee on all aspects of the Association's publications.

2. Composition: The PAC shall be composed of three members appointed by the President. The members of PAC shall serve for one year, but may be re-appointed for additional terms of one year each.

3. Duties: The PAC shall periodically review and make recommendations to the Executive Committee on rates, prices, frequency, mode of distribution, advertising within the publications, promotion of sales, style of printing, and content. The PAC shall periodically examine the Exchange List for additions or deletions; requests for addition to the Exchange List will be submitted to the PAC, and the PAC will make a recommendation to the Executive Committee.

E. Editor of Publications

1. The Executive Committee shall appoint an Editor of Publications, who shall serve at the pleasure of the Executive Committee.

2. The Executive Committee may grant an honorarium to the Editor.
CONFERENCES/MEETINGS - SOME PAST, SOME FUTURE

WESTERN ASSOCIATION OF MAP LIBRARIES

The following schedule of meetings, locations, and hosts was confirmed during the Fresno meeting of WAML on October 11-12, 1984:

Spring '85  Tempe, Arizona  Thurs. March 28- Fri. March 29
Arizona State Univ.  Sat. to Grand Canyon/maybe?  Rosanna Miller

Fall '85  Davis, Calif.  September 19 & 20, 1985
Univ. of California  David Lundquist

Spring '86  San Diego, Calif.  Week before Easter
San Diego State University  Muriel Strickland

Fall '86  Eugene, Oregon  September 11 & 12, 1986
Univ. of Oregon  Peter Stark
[in conjunction with Association of Pacific Coast Geographers]

Spring '87  Provo, Utah  Dates to be determined.
Brigham Young University  Riley Moffat

Fall '87  Denver, Colo.  Dates to be determined.
Denver Public Library  Donna Koepp

During '88  Laramie, Wyoming  Dates to be determined.

1984 Nov. 1-4  4th Annual Convention, International Map Dealers
San Francisco  Association (IMDA) San Francisco Airport Hilton
Contact: [same]  P.O. Box 10488, Dallas, TX 75207

Nov. 13  ASP/ACSM Public Land Survey System Workshop:
Denver, CO.  RM/URISA How can a geographic information sys-

1985 Jan. 5-10  American Library Association, Midwinter, MAGERT
Washington, D.C.
1985 Jan. 7
Washington, D.C.
Cartographic Users Advisory Council; meeting at
Library of Congress, G & M Div.  Contact:
Stan Stevens, Univ. Calif., Santa Cruz, 95064
Jan. 17-19
Fresno, Calif.
ASCM-ASP Regional Meeting

1985 Feb.
Christchurch, New Zealand
The Minutes of the Annual General Meeting of
the NZMKC held at Dunedin on Feb. 1, 1984,
indicate that the next Seminar will be held at
the Canterbury Public Library, Christchurch,
in Feb. 1985. Treasurer Bill Cutts and Marianne
Hanson are the organizing committee. "Sources
of Maps for Research in Canterbury" suggested
as the theme. Contact Ken Scadden, Carto-
graphic Archivist, P.O. Box 6148, Te Aro, Well-
ington, NZ.

Mar. 10-15
Washington, D.C.
ASCM-ASP "Theodolite to Satellite"
Contact: John D. Love, 9949 Portsmouth Road,
Manassas, VA 22110, tel. 301/443-8775

Mar. 11-14
Washington, D.C.
Auto-Carto 7: "Digital Representations of
Spatial Knowledge". Contact: Mary G. Clawson,
589 Center Drive, Severna Park, MD 21146,
tel. 301/459-3711

Mar. 28-29
Tempe, Arizona
WAML Spring Meeting. Contact: Rosanna Miller,
University Library, Arizona State University
Tempe, AZ 85281. Grand Canyon trip on Saturday
the 30th is under consideration. Watch for the
details in mailing to Members after Jan. 1st.

Apr. 20
Fresno, Calif.
California Map Society Contact: California Map
Society, 12021 Wilshire Blvd., Suite 2008,
Los Angeles, CA 90025 (tel 213/206-8188).

May 9-11
Quebec, Quebec
French Colonial Historical Society (early map-
ping & French New World Names). Contact: Prof.
Serge Courville, CELAT Faculte des lettres
Universite Laval, Quebec, Canada GIK 7P4

Jul. 8-12
Ottawa, Canada
Eleventh International Conference on the His-
tory of Cartography. National Map Collection
Public Archives of Canada, host. Held in con-
junction with Imago Mundi and the International
Society for the History of Cartography.
For detailed information write: "History of
Cartography Conference 1985", National Map Col-
lection, Public Archives of Canada, Ottawa,
Canada K1A 0N3. Tel. (613) 995-1077. Chair of
the event & Program is Edward H. Dahl. Those interested in presented papers should send an abstract of up to 300 words to reach the Committee by 1 Dec 1984, full papers by 1 Mar 1985. Topics are 1) teaching history of cartography; history of 20th Century cartography; history of Canadian cartography; computers & study of history of cartography; physical analysis of maps; curatorship of collections of historical maps; and, carto-bibliography. Registration fee for the conference is Cdn.$ 125.

Aug. 18-24
Chicago, Ill.
IFLA (International Federation of Library Associations)

Aug. 19-24
San Diego, Calif.
Society of Photo & Optical Instrumentation Eng.

Sep. 9-14
UCLA, LA, Calif.
Association of Pacific Coast Geographers

Sep. 12-15
UCLA, LA, Calif.

Sep. 19-20
UC Davis, Calif.
WAML Fall Meeting. Contact: Dave Lundquist, Shields Library, Univ. Calif. Davis, 95616

Oct. 23-25
Graz, Austria

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WESTERN ASSOCIATION OF MAP LIBRARIES

Fall Meeting, October 11-12, 1984
Room 1209, Henry Madden Library
California State University, Fresno

Thursday, October 11, 1984:

Welcome to Fresno by University President Harold Haak
and by University Librarian Mrs. L. Parker
Dr. Robert Merrill, CSUF Dept. of Geology:
"Seismic Activity & Geology of Central California"

Dr. Fareed Nader, CSUF Dept. of Civil Engineering, Surveying & Photogrammetry:
"Education for Surveying/Photogrammetry at CSUF"

Dr. Jon Avent, CSUF, Chairman of Geology Dept.:
"From the Andes to the Himalayas; a Geologist's Vacations"

Social Hour at home of Herb Fox. Dinner at Armenian restaurant, the Peach Tree.

Friday, October 12, 1984:

Dr. John Tinker, CSUF, Dept. of Sociology:
"Ethnic Migration Patterns in Fresno"

Dr. Donald Morgan, CSUF, Dept. of Geography:
"The Life Blood of the San Joaquin" [water & climate]

Dr. John Hatzopoulos, CSUF, Dept. of Civil Engineering, Surveying & Photogrammetry:
"Photogrammetry - Special Applications"

Herbert S. Fox, CSUF, Map Library:
"Topolobampo, American Utopia in Mexico"

WAML's Business Meeting & Reports of Liaisons to Associations
WAML's "Sounding Board"

Saturday, October 13, 1984:

Field Trip to Yosemite National Park: Dr. Chester Cole, CSUF, Dept. of Geography, tour guide.

Attendance at WAML Fall Meeting, Fresno, Oct. 11-12, 1984.

Mary Ansari
Larry Carver
Janet Collins
Linda Cottrell
Larry Cruse
Marvin Falk
John Fetros
Herb Fox
Jerry Greenberg
Steven Hiller
Phil Hoehn
Bill Hunt
Donna Koepp

University of Nevada, Reno
University of California, Santa Barbara
Western Washington University, Bellingham
University of Arizona, Tucson
University of California, San Diego
University of Alaska, Fairbanks
San Francisco Public Library
California State University, Fresno
University of Washington, Seattle
University of California, Berkeley
Map Traders, Santa Barbara, California
Denver Public Library, Denver, Colorado
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<tr>
<th>Name</th>
<th>Institution and Location</th>
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<tr>
<td>Dave Lundquist</td>
<td>University of California, Davis</td>
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<tr>
<td>Dorothy McGarry</td>
<td>University of California, Los Angeles</td>
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<td>Rosanna Miller</td>
<td>Arizona State University, Tempe</td>
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<td>Tommy Miller</td>
<td>Tempe, Arizona</td>
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<tr>
<td>Steve Mullin</td>
<td>Mexican Maps, Oakland, California</td>
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<tr>
<td>Linda Newman</td>
<td>University of Nevada, Reno</td>
</tr>
<tr>
<td>Michael Noga</td>
<td>Stanford University, Stanford, California</td>
</tr>
<tr>
<td>Harold Otness</td>
<td>Southern Oregon State College, Ashland</td>
</tr>
<tr>
<td>Bruce Robertson</td>
<td>University of Utah, Salt Lake City</td>
</tr>
<tr>
<td>Alice Sharp</td>
<td>Denver Public Library, Denver, Colorado</td>
</tr>
<tr>
<td>Vlad Shkurkin</td>
<td>Old Maps of Western Towns, San Pablo, Cal.</td>
</tr>
<tr>
<td>Peter Stark</td>
<td>University of Oregon, Eugene</td>
</tr>
<tr>
<td>Stan Stevens</td>
<td>University of California, Santa Cruz</td>
</tr>
<tr>
<td>Muriel Strickland</td>
<td>San Diego State University, San Diego, Cal.</td>
</tr>
<tr>
<td>Ron Whistance-Smith</td>
<td>University of Alberta, Edmonton</td>
</tr>
<tr>
<td>Maureen Wilson</td>
<td>University of British Columbia, Vancouver</td>
</tr>
<tr>
<td>Frances Woodward</td>
<td>University of British Columbia, Vancouver</td>
</tr>
<tr>
<td>Tom Zimoski</td>
<td>Fresno County Library, Fresno, California</td>
</tr>
</tbody>
</table>

CALL FOR PAPERS

The American Library Association will be holding its annual conference in Chicago from July 5-9, 1985. Papers for the annual conference are welcome on the following themes: maps for the public good (how maps and/or map libraries help government, private and commercial institutions and the general public; how map libraries can work with other agencies); historical mapping (preferably concentrating on the Midwest, Great Lakes or Canada); and new mapping or map preservation/access technologies (particularly by government agencies). Spoken presentations should be planned for no more than 20 minutes, although papers may well be lengthy.

Please send a title and brief description or outline by November 15, 1984. Paper selection will be made by December 1, 1984. Papers accepted for presentation will be considered for publication at a later date.

Contact: Philip Hoehn, Library-Map Room, University of California, Berkeley, California 94720.

The Geological Society of America holds its 97th Annual Meeting & Exposition, November 5-8, 1984, at the MGM Grand Hotel, Reno.

One of the Symposia held during this meeting will be the Geo-science Information Society's half-day symposium and a half-day contributed papers session. Entitled "Maps in the Geo-science Community", the program is under the direction of GIS Program Chairperson Claren Kidd (University of Oklahoma).

Topics of the symposium papers included: new technologies in
cartographic presentation; cartographic preservation; major
developments in geological cartography in the 18th and 19th
centuries; a case history of map use in a geoscience course;
a comparison of map user needs in business and academic envi-
ronments; and an update of what's new and what's planned by
the federal mapping programs. Additional map related papers
were given at the Technical Papers session in addition to some
on databases, collection development, and fund raising.

Speakers and topics included the following (partial list):

Larry Cruse. Things to consider before microfilming geologic
maps.
Janet K. Rudd. Comparison of map user needs in academic and
business environments.
H. Kit Fuller. Maps of maps - geologic map indexes by state
geoscience agencies.
Susan Klimley. Saving geology libraries: what's available?
Charlotte R.M. Derksen. Citation overlap among GEOARCHIVE,
GEOREF, PASCAL, and SCISEARCH.

* The Third International Conference on Geoscience Information
will be held in Adelaide, South Australia, at the Australian
Mineral Foundation from June 1-5, 1986, during South Austra-
lia's sesquicentennial year.

The theme of the conference is "Geoscience Information as a
Resource", which will cover the full spectrum of data and in-
formation cycles from generation, storage, retrieval, manipu-
lation, use and further generation - with emphasis on source
data and the impact of new technologies.

An Organising Committee has been formed, which includes:

Nancy Pruett, representing North America through the Geo-
science Information Society. Further information may be ob-
tained from Ms. Pruett at 3144 Technical Library, Sandia Na-
tional Laboratories, Albuquerque, NM 87185.

NORTH AMERICAN CARTOGRAPHIC INFORMATION SOCIETY

As reported in prior issues, NACIS held its meeting in Pittsburgh,
Pennsylvania, October 17-20, 1984. Among the presentations were
the following (selected):

Cartography and Geopolitics: an Inter-American perspective, by
Carlos B. Hagen, UCLA Map Library

Goals and activities of the Cartographic Users Advisory Council,
HelenJane Armstrong, University of Florida, Gainesville
The Research Libraries Information Network as a medium for sharing cartographic information, by Nancy A. Kandoian, New York Public L.

Developmental considerations for university map libraries: money vs. desires, by Jeffrey C. Patton & Nancy B. Ryckman, University of North Carolina at Greensboro

American Geographical Society Collection in Milwaukee, a decade later: a retrospective assessment, by William C. Roselle, University of Wisconsin, Milwaukee
MicroCartography

Fourteenth in a Series.

by

Larry Cruse

Map Section C-075p
University Library
University of California-San Diego
La Jolla, CA 92037
(phone 619/452-3338)

Color Micrographics

by

Ted Hodur

Micro Aero Charts, Inc.
5078 List Drive
Colorado Springs, CO 80919

Introduction

We live in a world surrounded by color. But "color", is probably one of the least understood potentials to the monochromatic world of micrographics. Technically speaking, we all visualize "color" differently from each others and are affected by "color" with distinctly varying tastes. What may be one man's torment, may be another man's pleasure.

"Color" can provide an obvious array of benefits. After extensive study and digesting volumes of information provided by the International Library, Archives and Museum of Optometry, St. Louis, Missouri, "color" and micrographic processes were simply, made for each other. The impact of color seems to fall within two classifications: "visual" and "Psychological".

Visual Impact

1. Color segregates, defines and enhances the perception of multi-intrinsic aggregates of data and information with simultaneous visual response.

2. By virtue of magnification and continuous tone displays, color expands the dimension of visual displays and exhibits less eyestrain than monochromatic (clear, B&W, phosphoring high contrast) visual projections.
3. Color, effects less visual "blurring" factor on the retina of the eye caused by constriction of the pupils as a result of contrast illumination.

4. Color improves visual assessment in modern, well illuminated environments. Whereas monochromatic displays have a tendency to compete with illuminates of similar wavelength & temperature. Color aids in the efficiency of the visual system by varying visual wavelengths and temperatures to offer faster segregation and greater visual perception for more extended periods of time.

**Psychological Impact**

1. By virtue of the pure esthetic quality of "Color", colored projections contribute to a more spontaneous mental response (i.e.: categoric response by color dimension and distinction within data classifications). The more spontaneous response to color stimulates visual perception, human potential, improves stability and thereby enhances the creative process. Whereas monochromatic displays require "search-and-study" principles, inhibiting visual perception and mental response, are much more interactive, monotonous, and annoying. To quote a favorite school administrator of mine "Black and white is boring!". Monochromatic displays contribute to a hypnotic quality in eluding thought processes as a natural defense mechanism. Described as analogous to the mental process when defining the stereophonic quality of a symphonic concert, when recorded and played back through a monaural system, monochromatic displays, dull the senses. Color, on the other hand, retards this process of mental fatigue.

2. Color increases the retainability of those things we preview, thus increasing learning potentials. Many studies to this effect were conducted within motion picture and audio-visual marketing applications. Learning processes are reinforced by polychromatic displays, as color impacts a more effective programming capacity into learning processes and memory recall. Age classifications of learning groups showed little, if any, variation, regarding these findings.

**Color History**

Colored microform has been around for quite some time but has only begun to flourish within the past few years. Plagued by mysteries of resolution, dye stability, archival standards and technical definition, "color" was classified as a novelty, rather than a viable alternative and supplement to, a very active and prospering monochromatic industry. Color was somewhat restricted to laboratory research and development, by the entrepreneurs, who kept disclosures under lock-and-key, to capitalize on limited, but demanding markets. This "hush-hush" attitude impeded and somewhat confined "color" as the elusive black sheep to a growing family of
monochromatic processes. There were very few readers or printers designed for colored application. There were only two film manufacturers who gave any consideration to colored microform: Eastman Kodak and Ilford. If you consider that "price" is the primary consideration when buying anything, colored microform appeared to be a very expensive alternative to black and white/monochromatic recording services. Colored micrographics was labeled "Expensive and Limited" without considering that "color" doesn't compete with black and white markets, at all. To a society, more concerned with terminologies like "resolution", "gamma", "modulation transfer function (MTF)", "optical transfer function (OTF)", and limited "reduction"; colored micrographics appeared to be limited in application, encapsulated by doubt, and shrouded by the cloak of comparisons to black and white services. Along with a philosophy, within the free enterprise system which dictates that, "He who does it cheaper, faster and better... succeeds", colored micrographics seemed doomed.

The problem of Newton Rings plagued the color application. Much more prominent in colored products than black and white, Newton Rings would drive a quality control or production manager to drink, when printing on typical card-to-roll systems. There was a tremendous amount of research and development to be done, before a production facility of any significance could be built.

Many individuals tried colored micrographics. Most failed as they either ran out of funds or ran out of answers. The primary dilemma was acceptability and analysis by a new criteria, as a merit function. Not until E.M. Granger and K.N. Cupery of Eastman Kodak Apparatus Division published their report, "An Optical Merit Function (SQF) Which Correlates with Subjective Image Judgments", did science have a criteria for subjective assessment of image quality that provided a practical method of predicting image quality and developing a reference standard to which a number could be assigned.

As a source of embarrassment to the optical society, who thought, for years, that the film product was the limiting factor to high resolution and OTF; they discovered that the optics was the limiting factor. Apochromatic lensing systems would have to be engineered that would exceed film MTF's. More stable emulsions would have to be designed and dye stability would have to improve drastically. "Color" presented so many obstacles and was so theoretical that it tested the patience of the most tenacious engineers.

The Color Potential

"Color", to the bewilderment of many people, is not, and cannot be considered in the same context as black and white, although it presents itself in the same format as black and white materials and employs most of the same recording, printing and projection techniques.
If "resolution" is sister and kin to "contrast", of what possible interest is contrast to a continuous tone media, if only to serve as a means of assigning a numerical assessment to an analytical bridge between the OTF and a subjective measurement of image quality? The OTF system is difficult to use in practical situations and is not easily related to conventional image attributes. Other factors such as grain and granularity play a hardship on subjective measurement criteria.

The demand for color in micrographics, re-kindled interests for perfecting the process. With environmental groups breathing down the neck of the lithographic industry; with the explosive impact word processing had on communications systems; with silver and color film prices skyrocketing within audio-visual markets; the need for color micrographics became more and more apparent. As the old saying goes, "Necessity is the mother of invention".

"Color" found a niche within the medical industry. With thousands of colored, continuous tone slides recorded daily in hospitals and medical colleges across the country, colored microfiche proved to be the most effective and economical means of distributing visual data for an industry which thrives on "color" as a diagnostic measure. What possible use is "contrast", as a measurement of resolution, to a pathologist, an art historian, an archivist who can do no more than sit idly by and watch centuries of history recorded in the form of etchings and colored drawings; our national heritage, crumbling from the sands of time? Cartographic, geophysical, landsat data, engineering drawings, charts and graphs, where "color" segregated pertinent data in the form of low and high contrast data, screamed for innovation and design. Government spending was growing daily, just trying to keep up with the paper demand. The best color could offer, in the form of economy, was 10-X to 13X reductions for large, source documents. Color microform, although infinitely easier to access, store and disseminate was more expensive than the printed lithographic form, at those reduction ratios.

Over an eight year research and development process, Micro Aero Charts, a Colorado Springs, Colorado, based corporation, developed lensing systems that now exceed film performance; developed a film process, anti-Newton-ring printing process; engineered a massive production facility with a 4,000,000 fiche per month potential; develop step and repeat formatting processes which enabled them to accurately compose a given number of varying size documents onto one fiche with accuracies to within .001"; developed the world's largest micrographic camera with a 57 x 113-inch capacity and reductions in excess of 20 diameters. The computerized focal conjugates are accurate to within .001" at the object plane and .00019" at the image plane. As an added feature, the camera system has the capacity to blow back the recorded image, through the recording lens to minimize distortions, and is accurate to within 400-X blow-back registration and with pin registered/vacuumized condensor chase, registration.
Micro Aero Charts' 32-room complex is essentially a positive pressure clean-room, supplemented by banks of HEPA (High Efficiency Particulate Air) filters, alpha particle nuclear air lines and steam-injected humidity levels for the control of static and film dimension stabilization. The camera rooms are protected from both seismic and sonic distortion, both of which could impede image quality. When Eastman Kodak closed their facilities in Rochester, Micro Aero Charts purchased most of their equipment and redesigned, rebuilt and modernized this equipment to our new, state-of-the-art standard. Recording formats are 35mm, 70mm, and 105mm, negative-to-positive processes. 12.5mm and 16mm formats are stripped down from the 35mm format, by customized film strippers. Once reduced to useable form, the negatives can be pin registered onto printing platten, allowing the mix and match of all formats within the same fiche, with precision accuracy. For the first time in the history of "color", multiples of large documents can be recorded in excess of 20-X reduction, with composition accuracy to within .001", on the same fiche format and mass produced by card-to-roll printing process (i.e.: four-40" x 60"", nine-25" x 38", eight-22" x 60", etc.).

To aid in the convenience of order processing, MAC (Micro Aero Charts) provides computer aided formatting procedures, typesetting services, graphically illustrated format designs from their arsenal of hardware which includes printers, plotters, PC's, IBM system 36, terminals throughout our facility which monitors our business systems, production planning, inventory control, chemical analysis, quality control, densitometry, mailing, collating and distribution to a world wide market.

With a marketing philosophy where "The Sun Shines on Everyone", MAC is dedicated to the exploitation of colored microform as a realistic alternative to economic modernization and the streamlining of communications systems, as a service company rather than a publisher. We are also working on the development of colored 16mm and 35mm cassette versions to be announced later this year.

With the introduction of the new Kodak Color Microfilm, emulsion and dye stability are no longer the problem. Eastman Kodak has stated in its summary that: "It is the color-release print film intended to last up to a century - even when stored at normal room temperature (approximately 70-degrees F, and 40% relative humidity). When carefully stored under recommended conditions (40-degrees F, and 40% relative humidity), it can last much much longer. In fact, stored properly, this film will last ten times longer than any other available release print film in widespread use today."

**Shop and Compare**

Colored microform, is still much more expensive than black
and white services. Microfiche can cost up to 8 times as much and although 16mm and 35mm cassette would reduce that factor by approximately 40%; colored microform is still more expensive than monochromatic forms. But, once again, let's not compare colored microform in the same competitive vein as black and white services.

Colored microfilm effects an incredible savings to users of lithographic 4-color printing and audio-visual systems, that can't, by virtue of their color content, be acceptably reduced to monochromatic displays.

**EXAMPLE:** 98 images from camera ready art in color. 1,000 copies to be distributed, either on 60 lb. offset enamel; or on 35mm slide format or colored microfiche.

<table>
<thead>
<tr>
<th></th>
<th>LITHOGRAPHIC</th>
<th>PHOTOGRAPHIC</th>
<th>MICROGRAPHIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>separations/format</td>
<td>$13,140.00</td>
<td>n/a</td>
<td>$147.00</td>
</tr>
<tr>
<td>paper stock: 8.5 x 11</td>
<td>$1,985.00</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>reproduction cost</td>
<td>$5,570.00</td>
<td>$43,218.00</td>
<td>$1,200.00</td>
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<tr>
<td>1st class postage</td>
<td>$1,560.00</td>
<td>$2,057.95</td>
<td>$170.00</td>
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<td>$22,255.00</td>
<td>$45,275.95</td>
<td>$1,517.00</td>
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Ratios......

|                        | .14.67...to..| ...29.84..    | ...to...1... |

Shipping weight (lbs.)

|                        | 537.50       | 765.60        | 5.60         |
| Cubic Inches           | 23,375.00    | 57,268.75     | 192.70       |

**EXAMPLE:** Four maps 40" x 60", 4-color camera ready art, 1,000 copies to be distributed as 60 lb. offset lithographs, 35mm slides, or colored microfiche.

<table>
<thead>
<tr>
<th></th>
<th>LITHOGRAPHIC</th>
<th>PHOTOGRAPHIC</th>
<th>MICROGRAPHIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/c separations/stock: 60 lb.</td>
<td>$10,000.00</td>
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<td>$100.00</td>
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<td>Reproduction cost</td>
<td>$4,300.00</td>
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<td>$1,200.00</td>
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<td>1st class postage</td>
<td>$3,296.64</td>
<td>$85.00</td>
<td>$170.00</td>
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<td></td>
<td>$19,596.64</td>
<td>$1,885.00</td>
<td>$1,470.00</td>
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</table>

Ratios......

|                        | .13.33...to..| ...1.28..     | ...to...1... |

Shipping Weight (lbs.)

|                        | 1,212.40     | 499.98        | 5.60         |
| Cubic Inches           | 9,600.00     | 2,337.50      | 192.70       |
Other Statistics:

For those of you still concerned with resolution, Kodak's negative film is a 160 line pairs per millimeter (lppm), and their release print film is a 600 lppm film. The release print film has a gamma contrast rendition of approximately 2.7, with a hardened emulsion supported by a 7.8-mil thick acetate base. The color card-to-roll microfiche print process employed by Micro Aero Charts is a Newton-ring-free system and the film stabilizes in dimension and flatness at 72 degrees and 55% relative humidity index. The lensing system designed by Micro Aero Charts can successfully record about 250 to 350 lppm as an apochromatic series system.

When an approaching technology screams for attention, we all scream for standards. After all, we live by the rules, play by the rules and will probably die by the rules. Let's try to unearth the possibility of establishing a standard for colored microform. The amazing truth is that there are very few published standards regarding color micrographics. Color technologies are changing so fast and the applications are so widespread that, in all probability, any standard, mandatory or otherwise, academic or factual, would probably be obsolete before all the facts could be gathered and published. To avoid establishing these standards as a means derived by the second generation of black and white standards; to avoid being rhetorical or ambiguous, let's focus on some of the more proven and historical application-derived evolutions in color; address some of the age old questions and attempt to provide a viable prognosis for this most obvious evolutions of, and supplements to, the monochromatic world of micrographics.

Investments in the Future

"System Integration" may be the key phrase in determining what works best for your particular application. Organizing, recording and retrieving useful data; making it serve a purpose to achieve a useful end product and successful result, seems to be the creed of modern business. There will be a merging of the old and the new. It's ironic to think that information systems have progressed from optical-to digital- to optical processes again. The maintenance of magnetic systems is becoming more of a concern to businesses, who are deluged with tapes that are in constant need of refreshing to defeat magnetic drift. Archival permanence and the verification of data may become a future nightmare due to accidental erasure, vulnerability to overwriting, and physical damage. A hybrid system, a mixture of recording media, seems imminent. Neither film nor electronic technologies are the "alpha-anN-omega" for application driven systems. Surrounded by a world of color, access and segregation of information within a spontaneous environment shall reap the rewards of creative minds, minds exposed to "color".
ACKNOWLEDGEMENTS:

Acknowledgement is due to the many Eastman Kodak personnel who assisted in this work. Special acknowledgement is due to Dr. E. M. Granger, Dr. C. Bard, E. Kluza, F. Drago, and P. Mutter, who collaborated in the technical development of Micro Aero Charts, Inc., the scientific data and research contained herein.

REFERENCES:


4. E.M. Granger and K.N. Cupery, SPSE (1972), vol. 16, No. 3


ADVANTAGES OF COLOR MICROFICHE OVER OTHER FORMS OF INFORMATION MEDIA:

COLOR:
Scientific studies have concluded that, compared to black and white, COLOR material has positive visual and psychological impacts on its users. COLOR more effectively segregates tonal detail to improve visual assessment. COLOR significantly enhances the user’s creative mental process. Reader eye strain and fatigue are reduced 85% when viewing COLOR material versus black and white.

HIGH QUALITY:
Our color microfiche are created using the highest quality Kodak negative and positive films produced. These films are far superior to other films normally available to commercial markets. The positive film has resolution of 600 line pairs per millimeter and extremely stable dye characteristics. Comparatively, color microfiche is 25 times more resolute than four color printing and 300 times more resolute than a computer CRT. The medical and archival professions frequently use color microfiche because of its superior quality characteristics.

COMPACT:
Color microfiche formats can be created from originals as small as color slides to originals as large as 48"x72" color hardcopies. Originals are reduced from 1 to 48 times, resulting in anywhere from 1 to 720 high quality images on each 4"x6" color microfiche. Microfiche readers range from inexpensive portable pocket readers to a variety of desktop readers and projectors.

Checkers are frequently used to reduce large rooms to a single filing cabinet.

LOW COST:
An entire book of up to 360 pages can be put on a single color file for as low as $1.20 per copy. With so much quality information in such a small area, the cost savings in transportation, storage, and retrieval are many times more than the production cost savings. The following table illustrates the dramatic production cost savings that color microfiche offers over alternative information media. This data is based on comparative costs for masters plus 1,000 copies.

<table>
<thead>
<tr>
<th>Black &amp; White Lithography</th>
<th>Color Lithography</th>
<th>Color Photography</th>
<th>Color Slides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Microfiche is lower in cost than the listed alternatives by:</td>
<td>1/5th</td>
<td>1/10th</td>
<td>1/30th</td>
</tr>
</tbody>
</table>

DURABILITY:
Color microfiche copies will last 100 years when stored at room temperature and many times as long when stored in a controlled environment. Color microfiche are almost impossible to tear, are not damaged by water, and once the negative is made, more copies can be printed at any time.

APPLICATIONS FOR COLOR MICROFICHE:

1) LARGE CHARTS AND MAPS:
Aviation maps, airport approach charts, city demographic and utility maps, military maps, navigational maps, police disaster maps, atmospheric and oceanographic charts, forest topographical maps, hiker maps, atlas maps, stock history financial charts.

2) SERVICE/TRAINING/PARTS MANUALS:
Electronic companies, automobile companies, food service, camera companies, health service, aircraft companies, many others.

3) DIAGRAMS:
Engineering drawings, architectural diagrams, printed circuit board layouts, wiring diagrams, large color plotter output.

IV) MEDICAL & BIOLOGICAL:
Pathology, studying cells, operation procedures, plant identification, animal identification, pharmaceutical, veterinary, medical diagnosis.

V) CATALOGING & IDENTIFICATION:
National Archives, art history, coin and stamp identification, libraries, police mug shots, computer digital output.

VI) MARKETING & AUDIO VISUAL:
Brochures, real estate, art, product manuals, airplanes, boats, precious stones, antiques.

VII) SCIENTIFIC:
Core sample readings, seismographic readings, space photography, underwater photography, chemical analysis, petroleum research.
### COLOR MICROFICHE PRICING

These prices are only a guide and each customer's work will be evaluated individually.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Sales Unit</th>
<th>Price Per Sales Unit</th>
<th>Minimum Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>44010</td>
<td>Basic Formatting Charge (The basic formatting charge covers recording and formatting the customer's original material. The material must be all the same type and same quality (i.e., slides). Each basic format also includes a color transparency header.)</td>
<td>Per Image</td>
<td>1.50</td>
<td>75.00</td>
</tr>
<tr>
<td>44020</td>
<td>Custom Formatting Charge (A variety of custom formatting services are available through MAC's Art &amp; Composition Department. These services are tailored to the customer's specifications and include mixing media, reduction ratio changes, frame 10's, color adjusting, text preparation, etc.)</td>
<td>Per Hour</td>
<td>50.00</td>
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<tr>
<td>44030</td>
<td>Customer Do It Yourself Negatives (MAC supplies negative film for customer recording. MAC then processes the customer's negatives and creates the format from which copies are made.)</td>
<td>Per Format</td>
<td>40.00</td>
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### PROOF SETS

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<th>Price Per Sales Unit</th>
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<tr>
<td>44040</td>
<td>Standard Release Proof Set (one set consist of two proofs for customer input and format verification.)</td>
<td>Per Set</td>
<td>25.00</td>
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<tr>
<td>44050</td>
<td>Density Evaluation Proof Set (one set consist of one standard proof plus one higher and one lower density for customer input and format verification and density evaluation.)</td>
<td>Per Set</td>
<td>35.00</td>
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</tbody>
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### COLOR MICROFICHE COPIES PRODUCED PER FORMAT

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<tr>
<th>Part Number</th>
<th>Description</th>
<th>Sales Unit</th>
<th>Price Per Sales Unit</th>
<th>Minimum Price</th>
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<tr>
<td>55010</td>
<td>01 to 99</td>
<td>Per Fiche</td>
<td>2.30</td>
<td>115.00</td>
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<td>55030</td>
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<td>Per Fiche</td>
<td>1.40</td>
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<td>55040</td>
<td>600 to 999</td>
<td>Per Fiche</td>
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<tr>
<td>55050</td>
<td>1,000 or more</td>
<td>Per Fiche</td>
<td>1.20</td>
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### ADDITIONAL SERVICES

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<th>Sales Unit</th>
<th>Price Per Sales Unit</th>
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</thead>
<tbody>
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<td>44060</td>
<td>Reprint Setup Charges (for prev. formatted jobs)</td>
<td>Per Format</td>
<td>25.00</td>
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<tr>
<td>22010</td>
<td>Mailing Label Preparation</td>
<td>Per Label</td>
<td>1.10</td>
</tr>
<tr>
<td>22020</td>
<td>Fiche Collation, Distribution, and Other Services</td>
<td>Per Hour</td>
<td>25.00</td>
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<tr>
<td>99010</td>
<td>Rush Order Premium (As Requested)</td>
<td>Per Order</td>
<td>Quote</td>
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<td>55140</td>
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These prices are only a guide and each customer's work will be evaluated individually.

We Use Kodak Products!
In addition to the substantial QUANTITY discounts that are available to you on color microfiche copies (from $2.30/copy to $1.05/copy), Micro Aero Charts also offers every customer an annual PURCHASE VOLUME discount. Outlined below are the details of how the purchase volume discount is structured.

We believe these two discount programs result in passing along to you, the customer, the cost savings which we achieve during larger production runs, and also reward, on an equitable basis, customers with large single orders as well as continuing customers who build up a large order volume over time.

Please contact us if you have any questions on pricing our services or on how you can take advantage of these two discount programs.

<table>
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<th>Annual Purchase Volume ($)</th>
<th>Volume Subject To Discount ($)</th>
<th>Discount Applied (%)</th>
<th>Earned Discount By Level ($)</th>
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- All purchases from Micro Aero Charts apply towards your annual discount.

- Each customer accumulates purchases from October 1st, or whenever his first order is placed, until September 30th. The total of your purchases for the one year period or shorter is applied to the table above to determine your total annual purchase discount.

- Normally, the discount you earn will be accumulated throughout the year and remitted to you by check in October or credited against future purchases.

- The discount is earned and available to you at any time during the year in which you are making purchases. This means you may request a check or credit to your account for discounts earned at any point in time. However, your annual accumulated purchases will be set back to zero for discount purposes if you request credit prior to October.

- The discount plan begins on October 1, 1984. Any purchases made prior to this date will be added to your purchases made during 1984/85 for calculating the discount to be remitted in October 1985.
MicroCartography

by Larry Cruse

Journal Citations:


ABSTRACT: A new method of mapping census data has been developed in Australia, involving the joint application of computational, automatic film recording, optical printing and microfiche technologies. The method has resulted in dramatic reductions in the cost of producing, duplicating and distributing maps of agricultural-pastoral land uses and maps of population-housing conditions.

[Passed along without comment:]

"A Note on Color Microfiche"

Ormonde recently began producing their color collections on a new superior-quality film stock which greatly increases the lifespan of the microfiche. In fact, its keeping qualities are five to ten times superior to most conventional color microfilms. Under archival storage conditions, i.e. at controlled temperature of 20-degrees-C and humidity below 40% RH, the degradation of its dyes is so small that a useful lifespan of well over 100 years can be expected." from Micro News 5(4) September 1984 (available from Clearwater Publishing Company, Inc., 1995 Broadway, New York, NY 10023.)

Microform Review Volume 13, No. 3, Summer 1984:


2. "Microform Ltd. responds to Microform Review" is a response to the review of 'American Manuscript Maps in British Repositories 1763-1783, Phase I: from the Peace of Paris to the American Revolution', clarifying why the set was filmed the way it was (e.g., positive rather than negative and only manuscript or annotated printed maps rather than all maps appearing in Peter A. Pengold's Maps and Plans in the Public Record Office, Volume 2: America and West Indies (HMSO, 1974). "In due course, other collections of maps covering other periods will appear in our series." (pp. 160-162)
3. **Wyoming Cities and Towns, 1883-1903**, Vlad Shkurkin's continuing series of Sanborn fire insurance plans, is perceptively reviewed by Jerry Post.

Jerry wisely concludes his review with the observation that microfiche would have been preferable to roll film for these Sanborn atlases, a conclusion which spontaneously occurred to many map librarians who previewed the Chadwyck-Healy comprehensive set. Both editions, by-the-way, are actually produced by the Library of Congress Photoduplication Service.

Vlad has been diligently investigating the background of Sanborn map publishing and his asides at WAML meetings lead me to wonder if a book is not forthcoming. In the meantime, Vlad delivered an excellent paper on Sanborn mapping at the New Mexico Historical Society's annual meeting last April: "Maps as Primary Historic Records". For a copy of this publication, (his catalog # 41-0), write: Vlad Shkurkin, 6025 Rose Arbor, San Pablo, CA 94806. (tel.) 415/ 232-7742.

*Surveying and Mapping* 44(2) 1984, pp. 129-133: "Survey Information from Railroads," by Jack C. McDermott, details of the history, collection, microfilming and integration of 3,900 railroad maps into the Missouri Land Survey. Fiche and paper duplicates are available, contact: Office of State Land Surveyor, P.O. Box 250, Rolla, MO 65401.

*The Compass* No. 3, 1984, pp. 3-10. Issue devoted to photoplotters: "Laser Photoplotting Comes of Age," details current techniques for computer generation high resolution film and film separations for maps and remote sensing, among other applications. Article reviews specific hardware of five manufacturers. It is followed by a brief review of "Fiber Optic Photoplotters -- An Innovative New Technology."

"SLAR Side-Looking Airborne Radar". This fact sheet details coverage and availability of (graphic?) SLAR Microfiche Reference System. Contact EROS Data Center, User Services Section, Sioux Falls, SD 57198, (tel.) 605/ 594-6151, for a copy of the fact sheet and further details.

*Wings* 14(3), June 1984, pp. 20-29, 48-55: "F 106, Biggest Deal of the Century Series," by Duane W. Deal, includes details and illustrates this aircraft's "Tactical Situation Display", ... a round, foot-wide reverse projection screen upon which 63 selected 35mm maps can be projected .... (p. 26). The unit is illustrated on pages 54 and 55.

"All About Automotive Navigation Systems," by Danny Goodman, *Radio-Electronics* 54(7): 43-46, July 1983, is a well illustrated article on the technology used to build the current generation of in-car maps. One system, "The Navigator" is so similar to those designed for military aircraft such as the F-106 that
it may seem redundant to mention it. However, the cutaway illustration detailing the hybrid microfilm/microcomputer zoom lens, fiber optic projector is worth studying. Honda's "Electro Gyro-Cator" is the other microform system described, and better illustrated than I've seen anywhere else.

Equipment

3M has just released their new Scotch "Magic Plus" removable transparent tape. Identical in appearance to their "Magic Transparent Tape," it can be taken off without damage to paper surfaces (claims the manufacturer). The only caveats are that it "may leave a mark on some surfaces and lift correctable ink. Test before using."

For a free sample, write 3M, Commercial Tape Division, St. Paul MN 55144, (tel.) 1-800-792-1014, weekdays 8:30 am - 4:30 pm CST. This telephone number, by the way, can be used for any questions about 3M tapes.

The CAPS A-1 Mark 2 is a 35mm reader/printer suitable for map blow-back. It is the type of machine used by map agents in Britain to blow-back large scale monochrome maps to full size, and, in fact, the Ordnance Survey has tailored at least two of its map series to fit this equipment. It would also be useful for making full-page copies of newspapers and other 35mm data. The lens is noteworthy for its zoom capability. At half-price, it might fit your budget. [Described below in advertisement from Alan Gordon Enterprises, Inc.]

CAPS A-1 Mark 2 Reader Printer*. It is an electrostatic reader-printer with universal input. It accepts aperture cards, jackets, microfiche, and 16mm or 35mm roll film. (*Identical to OCE 3710 and Imtec 3710.)

This unit has a magnification range of 7.4x up to 23x which is continuously variable. Electrostatic prints up to 24" x 36" are easily produced.

The A-1 Mark 2 produces up to 4 positive prints per minute from either positive or negative film. The unit is table-top operated and has a self-contained paper storage area.

Specifications:
Magnification: 7.4x to 23x.
Print Size: Up to 24" x 36".
Print Speed: 2 to 4 prints per minute.
Illumination: 150 watt tungsten-halogen.
Power Requirements: 105-125V/200-250V 50/60 Hz.
Developer: Electrostatic liquid toner.
Dimensions: 39.5"H, 43.75"D, 54.5"L.
Weight: 340 pounds.

Current list price ......................... $ 13,950.00
A-G-E special price, factory new .. $ 7,995.00
alan gordon enterprises inc., 5362 Cahuenga Blvd., North Hollywood, CA 91605 / P.O. Box 3914, No. Hollywood, CA 91605
Telephone: (818) 985-5500

Also available from the above source is its catalog: Stereo Plotting Instruments. Catalog 14.

National Development Plans

1,726 National Development Plans for 182 countries are available on microfiche. Most contain maps. Coverage is worldwide, covering the period from WWII to present. For a free catalog contact, Clearwater Publishing, 1995 Broadway, New York, NY 10023 (tel.) 212/ 873-2100.

Australian Microfilming

The Australian Electoral Office has undertaken a project to produce a set of microfiche of all proclaimed Commonwealth electoral maps since Federation.

Each set includes approximately 1100 microfiche with one map per fiche. It is organised chronologically by State and will be supplied packaged and with an index. It is intended that following redistributions in the future, microfiche of new maps will be available.

Latrobe Colourlab of Melbourne which has done the filming advises that the fiche is best seen on a fiche reader with a low magnification lens such as 14.8 or on an overhead projector.

Each complete set of fiche will cost about $400. [Australian]

The Australian Electoral Office is now seeking expressions of interest in buying sets of the microfiche or in obtaining copies of the Catalogue of Commonwealth electoral maps in loose-leaf form. If you are interested in doing so, or if you would like further details, please contact:

Ms. Susan Cubbage
Australian Electoral Office
P.O. Box 291
Civic Square, ACT 2608
Australia
(phone: (062) 435416

[Source: The Australian Map Circle Newsletter 28, June 1983]
WAML Microfilming Consortium

The WAML project to microfiche a complete set of Cassini and Carte de France revolutionary era maps of France has reached its basic subscriber threshold of 10. Participants include Brigham Young University; Archives, Church of Latter Day Saints; National Map Collection of Canada; New York Public Library; and the Universities of Alberta, California (Berkeley, San Diego, Santa Cruz), Oregon, and Wyoming. LC G&M will get a set for doing the work. These and any others we receive before December 1st 1984 will be supplied at $239. per set ($1.40 per map). Sales outside the Consortium will be for $372 per set ($2.18 per map), still only a fraction of the facsimile price from the Institute Geographique Nationale.

At UCSD, our strategy for returning these maps to paper will include departmental 8.5" x 11" reader/printers with magnifications of 13, 18, 21, 24, 45, and 90 X, an on-campus 18" x 24" reader/printer which will reproduce about 1/6th fiche per print at 13x and commercial blue-print shops which will blow-back the entire sheet for about $1.25 per square foot, at any scale and size the patron contracts for. Since the blue-printer will be using equipment similar to that which made the original fiche, we expect results equivalent to the IGN facsimiles, and surpassing them in many ways. For instance, we can use them as negatives to supply camera ready copy of any size and scale for faculty publications, and inexpensive copies to support student papers. We also think they will be popular with genealogists, since their reduced cost will stretch our budget 10 times further and their reduced size will effectively give us storage capacity.

German Mapping

LC Photoduplication is in the process of microfiching 19th and early 20th Century German maps. Anyone interested in a discount on these maps should also contact me.

Canadian Mapping

The following rolls may be of interest. All cover Montreal, Quebec, and/or Quebec Province:

ATLAS GEOGRAPHIQUE, 169___1715. By Guillaume de L'Ile. 1975. $11.00 (Canadian).

ATLAS OF THE ISLAND AND CITY OF MONTREAL AND ILE BIZARD, 18____. Compiled by A. R. Pinsoneault. 1975. $10.00 (Canadian).

PLANS D'ASSURANCES DE VILLES DU QUEBEC, RELEVES ENTRE 1885 ET 1951. 1977. $35.00 (Canadian).
PLANS OFFICIELS DES COMTÉS D'HOCHELAGA ET DE
$10.00 (Canadian).

TO HIS ROYAL HIGHNESS GEORGE AUGUSTUS FREDERICK ...
THIS TOPOGRAPHICAL MAP OF THE PROVINCE OF LOWER CANADA,
1815. By Joseph Bouchette. Service de Microphotographie,
Bibliothèque national du Québec, 1700, rue Saint-Denis,
Montreal (Quebec), Canada H2X 3K6. 1978. $10.00 (Canadian).

WAML Microform Map Indexing Project

I have the software to run this indexing Project and should have a
product by the next issue. Right now we are trying to coordinate
our efforts with Donna Koepp so that our indexing will be
compatible.

Since the project will be a Microform International Map Index, I
propose to call it Mimi -- it has a nice Maurice Chavelier ring to
it, although I hope it proves to be more than a "lovely little
good for nothing, Mimi." The plan is to issue fiche of the index
twice a year, beginning in March at about $10.

Standard for Cartographic Microforms

The laborious process of standardizing practice for map microforms
came one step nearer completion with return of the draft standard
by Committee members to the Chairman, Ralph Ehrenberg, on
September 21st.

The Bernice P. Bishop Museum, Geography and Map Division,
has a unique series of World War II vintage Pacific Basin air-
photos and maps, suffering the ravages of time.

If you would like to share in a project to microfilm these
materials, please let me know. We will first analyze the ex-
tent and chronology of holdings, then decide on the repro-
graphics most appropriate. Each participant will then obtain
a duplicate set of the air photos and maps for those areas and
periods desired.

U.C. Berkeley

Phil Hoehn has volunteered the extensive 19th Century nautical
chart holdings of the UC Berkeley map collection for microfiche
production. The initial segment of this project will concentrate
on all nautical charts covering the Pacific Coast of North
America, up to 1900, including French, British and American
charts. We will initiate the filming in late spring 1985, or
early Summer. The second phase of this project will cover the
Pacific Coast of South America and will be done late next year.
We will continue these increments until a world-wide collection is
complete.
Please respond to Larry Cruse [address on masthead]:

____ I would like more information on the Bishop Museum project.

____ I would like to participate in the French Revolution era project. $198 for a complete set of Cassini and Carte de France maps on microfiche.

____ I am interested in a project to microfiche 19th Century nautical charts of the Pacific Coast of North America for about 30-cents per chart.

THE STATE MAPPING ADVISORY COMMITTEE:
it's basis and its function in major public mapping programs

by

Lawrence Edwards
former Chair
Washington State Mapping Advisory Committee
Olympia, Washington

Base maps to most individual users mean U. S. Geological Survey (USGS) - State topographic maps, 1:250,000 map series, 15-minute quadrangles, and 7 1/2-minute quadrangles. To the individual it would appear that the National Mapping Division (NMD) of USGS is pursuing a program to provide all sorts of maps to our citizens because it is a good idea and they want them.

But, in fact, the process is much more complicated than that. The National Mapping Division is part of the USGS, which is part of the Department of Interior. And each year the Department of Interior must submit its budget request through the Office of Management and the Budget (OMB) to Congress in order to have funds available to do the many things which it does, mapping included.

It is generally expected in the governmental budgeting and planning processes that justification must substantiate the need for each program and its funding request. Following guidelines presented in a document called OMB Circular A-16, federal agencies have the opportunity to state their needs for various topographic map products and programs. With this input USGS is able to establish workload schedules and funding requirements with justification to satisfy the needs of the federal agencies.

Presented at the Spring WAML Meeting, Seattle, April 6-7, 1984.
The following statement is an over simplification for the sake of discussion, but the A-16 process simply does not recognize the needs of our states, counties, cities, and general public. An exception to this is in the case where states have contributed cooperative funding directly to the NMD in order to obtain priority mapping of specific areas of need to the state.

By this, I do not mean to say USGS is insensitive to the needs of the citizens of the nation, and I apologize in advance and stand corrected if the simplified explanation of the process seems that way. On the contrary, in order to better recognize the state and local needs for standard base map products, the NMD has established and promoted a program to receive input in the form of needs and priorities from the states.

In 1975, for example, the Chief, Office of Plans and Program Development of the Topographic Division, said, "We are looking for better ways to assess state and local requirements for mapping and also to make more people aware of our mapping program." And again in 1977 from the Chief of the Topographic Division,

We think that we should broaden our contact with state personnel to include more than our traditional contacts ... We should develop a broader based state contact such as the SMAC. ... a SMAC established by the Governor's office might assure that all state interest will be properly represented.

Some of the capabilities envisioned as possibilities resulting from the functioning of SMACs included:

* Guide plans and any cooperative funding into channels more in line with the highest state program priorities' needs.
* Prepare broad base statewide user response to questionnaires such as metric conversion.
* Serve as NCIC focal point for processing state data input and user data requests to the national data bank.
* Make federal plans and data locally available.

The survey has made available a document State Mapping Advisory Committee Guide for Organization and Operation (Revised January, 1977). This has been reproduced and attached as an Appendix. This guide designed for use by the states discusses the need for a committee, suggests its composition, outlines important objectives, reporting methods, and scheduled activities.

As a result of the USGS stimulation, mapping advisory committees have been established in as many as 28 states. These states were recently contacted about the status and activities of the committees. Responses were received from 23 states. Comments
indicate 18 committees are active, 4 are inactive, and one is inactive but reorganizing. The status of committees in five states is unknown.

Several of the states responding indicated the purpose of their SMAC had been to coordinate cooperative funding and/or set priorities for the completion of primary mapping. With the completion of the 7 1/2-minute program or termination of funding the committees have ceased to function.

Initially, many of the committees were formed and have continued to function as a result of a Governor's Executive Order or similar document. The USGS committee guidelines have recommended some type of official basis.

Three states, California, Utah, and Washington, indicated a legislative recognition of base mapping needs and establishment of agency responsibility for base mapping coordination and/or funding. As a result, these agencies have formed a SMAC to assist in the accomplishments of their responsibility. Other states' committees have been formed as a result of a local agency initiative, and some are simply informal gatherings of interested parties.

In a number of the cases, the executive orders have set the membership as well as the authority. In others the lead agency has designated the membership and representation. Some states indicate there is no formal membership basis.

USGS has indicated that the committees should be made up of representatives of state agencies, private organizations, and institutions with statewide interest. Federal agencies should not be represented since their requirements are transmitted to USGS through the A-16 process. Nevertheless, in many states the federal agencies having functions within the states boundaries have been encouraged to participate by the states in an effort to achieve greater information sharing and awareness of mapping programs and needs to the benefit of all.

Total membership ranges from 6 to 55, with the majority being in the 15 to 20 range. There are some interesting variations from state to state. All have some state agency representation, though not necessarily a majority. Ten include representatives from federal agencies ranging from a single USGS member, to a high of 18 for the State of Washington. Most include representatives from the academic institution of the state, departments of geography and geology. Some specifically request general public representation from environmental or recreational interest groups, and private enterprise map producers. Counties, cities, regional agencies, and Chambers of Commerce also participate. A recently publicized meeting in Missouri had an attendance of 95 (though only 18 are officially committee members) including two television media people.
Meetings for the most part are held annually, though some are quarterly. Vermont indicates its SMAC meets monthly.

Justification for the frequency of meetings may be found in the major goals and objectives of the charge of the various committees. Most have indicated rather broad objectives to:

1. share information about mapping needs and programs,
2. set priorities and support the programs of USGS National Mapping Division, and
3. coordinate mapping efforts within state agencies.

It is apparent, however, that some states are evolving some rather major mapping and geographic data programs of their own, independent and distinct from those of the National Mapping Program. Therefore, they have a more intense coordination requirement within the state. In this respect, we are seeing a growth or shifting of responsibility of the SMAC beyond that for which it may have originally been formed.

The State of Colorado, for example, in 1978 established a State Cartographer to consult, advise, and assist state, regional, county, and local organizations in matters of cartography and aerial photography; to coordinate and monitor mapping agreements; to provide official base maps and indexes of map and photo resources; and to provide statewide high altitude photography; to coordinate remote sensing projects; to develop and maintain mapping standards; and to coordinate and prepare all state mapping budgets. In addition, a mapping advisory committee was established under the State Cartographer with a mission statement similar to that of most SMACs.

It is believed that a similar effort was undertaken in Florida and Indiana early to create state mapping authorities responsible for all map production. Over the years State Mapping Authorities, State Mapping Service Centers, and so forth, may have been considered in many states including Washington. However, this has not generally been the thrust nor the intent of State Mapping Advisory Committees.

In these days of ever rising costs, changing technology, and increased needs, these SMACs can and do provide a means for map producers and map users to be aware of each other and each other's programs. It is both hoped and expected that at times cooperative efforts will result when common needs are recognized through the increased awareness.

This is the position which is being assumed by the Washington State committee. Our next state meeting will be held in May. Like many other states, our primary topographic quadrangle mapping is nearly complete or scheduled for completion very soon. But many of our maps are 30 years old. We are concerned not only about the obsolescence of the information content of these old
maps, but also about the accuracy of these early maps. Therefore, we will be addressing the needs for a revision program and priorities in support of the USGS National Mapping Program.

Another key agenda item will address the interests in a digital mapping program. That is, committee members will be asked about their needs for various types of digital line graphics as produced by USGS. Since USGS has not at present identified and budgeted a comprehensive statewide digital mapping effort for all data layers, we will be investigating the basis for a cooperative program.

The final agenda item will simply allow each participating agency (state, federal, or local) to report its present and immediate future mapping activities.

In this respect, I believe the Washington State Mapping Advisory Committee is following the intent of both the USGS suggestions and the state codes in meeting the needs of the people of the state.

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APPENDIX

STATE MAPPING ADVISORY COMMITTEE
GUIDE FOR ORGANIZATION AND OPERATION
(Revised January 1977)

1. Need for a Committee

The USGS's Topographic Division recognizes the need for establishing State Mapping Advisory Committees (SMACs) in all States to consider and report statewide interests and requirements for topographic maps, basic cartographic data, and other map products. The requirements of Federal map-using agencies are annually transmitted to the Survey in accordance with procedures established by the Office of Management and Budget Circular A-16. State requirements for mapping are also needed, preferably from a central group such as a State Mapping Advisory Committee, for use in planning the annual program.

2. Composition of the Committee

A SMAC should be an official or quasi-official group made up of representatives of State agencies, private organizations, and institutions with statewide interest. Wider representation means a better consensus of statewide mapping requirements. Federal agencies should not be represented on a SMAC, since their requirements are transmitted through another channel. However, local Federal officials may be present at SMAC meetings and may well provide valuable advice.

Each committee should meet at least annually. A representative of the Topographic Division will be available to attend meetings as
advisor and to report on the status of mapping the State, available products, and new developments.

3. Objectives of the Committee

Some of the most important objectives of a SMAC are:

a. To consolidate statewide mapping requirements into a single annual report to the Geological Survey.

b. To inform map users of the State about the status of the mapping program and the availability of map materials.

c. To gain statewide support for financing a cooperative mapping program with the Geological Survey.

4. A Committee in a Cooperating State

Many states currently maintain cooperative mapping programs with the Geological Survey to expedite mapping to meet the needs of specific agencies, and to have a strong voice in selecting the areas to be mapped. These states may also have an advisory group that directs the cooperative program. Such a group might well provide the nucleus of a State Mapping Advisory Committee. Separate groups are not considered advisable.

5. Annual Report of State Mapping Requirements

SMACs should submit state requests for quadrangle mapping and revision by 7.5-minute quadrangle area. The 7.5-minute series is the basic series of the Geological Survey for the conterminous United States and Hawaii. Base maps for this purpose will be provided by the Geological Survey.

Requirements for maps in other series and for other products of Geological Survey should also be included in SMAC requests. Examples of these other products are high-altitude aerial photography, orthophoto quads, county maps, 1:100,000-scale maps, 1:250,000-scale maps, and State base maps, and digital map data. Requests for topo/bathy products can be stated at this time for the coastal and Great Lakes areas.

State mapping requirements should be sent to the Geological Survey by the first of February each year. The annual SMAC report should consolidate the map requirements of the State with statements of justification. The report should include:

(1) Requests for new 7.5-minute mapping or revision by 7.5-minute quadrangle areas, with priorities assigned.

(2) Requirements for other cartographic products of the Topographic Division, USGS.

(3) A statement of justification for each area requested.
To help the SMAC in its study of State mapping requirements, the USGS will provide the following:

1. U. S. indexes showing status and progress for quadrangle mapping, orthophoto quads, and intermediate-scale mapping.

2. State index.

3. A status report on mapping in the State.

For convenient reporting, the consolidated State requirements can be annotated on a State index map furnished by the Geological Survey.

6. Development of Annual Program

The Federal mapping program for each year must consider Federal as well as State requirements and the total amount of mapping that can be scheduled, based on production capacity and available funds. The Geological Survey will give SMAC requests and Federal agency requests equal consideration. As far as capacity permits, the Geological Survey will accommodate the highest priority requests of each SMAC.
A SELECTED BIBLIOGRAPHY AND DIRECTORY OF
STATE MAPPING ADVISORY COMMITTEES

by

Patricia A. Moore

Assistant Special Collections Librarian
Map & Geography Library
University of Illinois at Urbana-Champaign
and
Member, Illinois Mapping Advisory Committee (IMAC)

BACKGROUND:
Some bibliographical notes on State Mapping Advisory Committees

State mapping advisory committees are official or semi-official bodies which advise the U.S. Geological Survey on state mapping needs. Their most important objective is the consolidation of diverse state mapping requirements into an annual priority statement that can be used by the Geological Survey in its request to the Office of Management and Budget (OMB) for funding.

Historically, state mapping advisory committees have been active in some form since 1947 and are currently active in 24 states (Edwards, 1984). Presently they are geographically concentrated in the western states where basic 7.5-minute topographic needs are still being met (Bermel, 1980).

The existence of state mapping advisory committees (SMACs) is somewhat tenuous from year to year and is dependent on such matters as mapping progress, existence of a State Cartographer, state mapping programs, and legislative or executive support. Once initial 7.5-minute coverage has been completed there is a tendency to disband the committee, a common occurrence in the Midwestern states. Some SMACs operate out of the State Cartographer's Office and if this office is abolished, as was recently done in Colorado, the SMAC may no longer meet. Regardless of the progress of mapping and other factors, SMACs are still operational in many states today.

Membership on state mapping advisory committees follows guidelines established by the U.S. Geological Survey. Beginning in 1953, the USGS and other federal mapping agencies were required by the Bureau of the Budget to follow certain specifications for the reporting of their needs (OMB Circular A-16). The U.S. Geological Survey quickly recognized the need for including state
needs and suggested special committees be organized on a state basis to prioritize mapping needs and report them to the Geological Survey for incorporation into their annual request to the Bureau of the Budget (Guide for organization of a state mapping committee, 1954).

The 1954 guidelines stressed "the need for all map users within the state to have a voice in the setting of priorities in an attempt to end the era of a single person or single office setting single-purpose priorities on behalf of the state."

In 1977 the U.S. Geological Survey issued a revised document recommending that "a SMAC should be an official or quasi-official group made up of representatives of state agencies, private organizations and institutions with statewide interest" (State mapping advisory committee guide for organization and operation, 1977).

In addition to membership from these varied sectors, federal agencies maintain a liaison on most SMACs and contribute many members.

The membership of many state mapping advisory committees is determined by executive order, but in some of these cases there may also be non-voting members designated (Edwards, 1984). Interested persons included in the basic membership categories of the 1954 guidelines may belong to SMACs regardless of the method by which the committee was established. They may not be able to influence the committee's policy however. Map librarians are members of several SMACs, including those in Illinois, Oregon, Washington, Vermont, and Nevada. While their membership does not usually alter the decisions of the committees, they may represent the opinions of other librarians, for instance, on the subject of metrification, which might affect committee policy. Membership, also, affords them an opportunity to keep up with mapping developments in the state. These "developments" include federal and state programs, ranging from satellite imagery to large-scale specialized, e.g., urban, mapping.

Those interested in a mapping advisory committee in a certain state should first determine if one is active, and then contact its chairman for further information. In addition to Appendices provided here, lists of SMACs are usually available from the regional offices of National Cartographic Information Centers. Both the 1975 and 1977 guides for state mapping advisory committees issued by the U.S.G.S. also included them.

Information about specific committees is found in annual reports or minutes issued by the committees. Approximately half of the currently active committees issue annual reports (Edwards, 1984). While there is no centralized source of information about state mapping advisory committees, a few general studies have been
done; however, most are not published.

The brief bibliography which follows gives a historical overview of state mapping advisory committees. It and the attached appendices on active and inactive committees are intended to provide sources on the historical background as well as contacts for current information.

SELECTED BIBLIOGRAPHY OF SOURCES FOR GENERAL INFORMATION


History of joint funding agreements between U.S. Geological Survey and States in the National Mapping Program. Discusses role of State mapping advisory committees, National Cartographic Information Center's state affiliates and state cartographers. MAPS: Fig. 3. State Mapping Advisory Committee. Fig. 4. NCIC Affiliates.


Survey of SMACs operating in 23 states with brief historical introduction. Appendices include U.S. Geological Survey's State mapping advisory committee guide for organization and operation (rev. Jan. 1977), a listing of committees and their contacts, and a table of survey results giving detailed information including mapping interest areas, committee composition, meeting frequency, publications and lead agency. Text includes detailed information about the Washington MAC.


Historic document following on OMB Circular A-16's directives for reporting federal mapping needs in 1953 in which state mapping needs are first recognized by Geological Survey. Includes first guidelines, and gives requirements for reporting state needs to the Geological Survey.


Includes guidelines for composition and objectives of committees, information on filing annual reports, and cooperation with other state committees. Includes appendix of SMACs

State mapping advisory committee guide for organization and operation. (Rev. 1977. 7 p.)

Revision of 1975 guidelines with additional objectives to inform map users of the state about the status of mapping and the availability of map materials and to gain statewide support for financing a cooperative mapping program with U.S.G.S. Appendix B has list of "Present SMAC contacts".


Historical overview of mapping advisory committees in Rocky Mountain states. Expansive future role in map education and dissemination following on U.S. Geological Survey's 1977 revised directives foreseen.


Revision of Circular A-16, dated January 16, 1953, describing the responsibilities of Federal agencies with respect to coordination of surveying and mapping activities and instructions for reporting their annual mapping needs to the Bureau of the Budget.

STATE MAPPING ADVISORY COMMITTEES

ALABAMA
Dr. Ernest A. Mancini
State Geologist
Geological Survey of Alabama
University, Alabama 35486
telephone: 205-349-2852

ARIZONA
Mr. Paul A. Tessar
Arizona State Land Department
Resource Analysis Division
1624 West Adams, Room 302
Phoenix, Arizona 85007
Annual Report
telephone: 602-255-4061

CALIFORNIA
Mr. Kenneth L. Woodward
Chief, Support Branch
Division of Planning
Department of Water Resources
P.O. Box 388
Sacramento, California 95802
Annual report
telephone: 916-445-9610
DELAWARE
Mr. Thomas E. Pickett, Chairman
State Mapping Advisory Committee
Delaware Geological Survey
University of Delaware
Newark, Delaware 19716
telephone: 302-451-2833

HAWAII
Mr. Kazutaka Saiki, Chairman
Hawaii State Mapping Advisory Committee
Kalamanimoku Building
P.O. Box 119
Honolulu, Hawaii 96810
telephone: 808-548-7422

IDAHO
Mr. Ray Miller, Supervisor
Technical Services Section
Department of Lands
Statehouse
Boise, Idaho 83720
telephone: FTS 554-3816

ILLINOIS
Dr. Richard E. Dahlberg, Chairman
Illinois Mapping Advisory Committee
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Northern Illinois University
DeKalb, Illinois 60115
telephone: 815-753-0631

MAINE
Dr. Walter A. Anderson, Chairman
Maine Mapping Advisory Committee
Department of Conservation
State House Station 22
Augusta, Maine 14333

MARYLAND
Dr. Kenneth N. Weaver, Director
Maryland Geological Survey
The Johns Hopkins University
Baltimore, Maryland 21218
telephone: 301-338-7084

MISSISSIPPI
William C. Wall, Jr., Chairman
Mississippi Advisory Committee
Mississippi State Highway Department
State Highway Lab
Woodrow Wilson Boulevard
Jackson, Mississippi 39205

MISSOURI
W. Keith Wedge, Chairman
Missouri Mapping Advisory Committee
Department of Natural Resources
P.O. Box 250
Rolla, Missouri 65401
(reorganized 1982)
telephone: 314-364-1752

MONTANA
Dr. Edward C. Bingler, Director
Montana Bureau of Mines and Geology
Butte, Montana 59701
(reactivated 1975)
telephone: 406-496-4181
NEBRASKA

Mr. Marvin P. Carlson
Assistant Director
Conservation and Survey Division
Nebraska Mapping Advisory Committee
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Nevada Bureau of Mines and Geology
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Reno, Nevada 89557-0088

Annual Report
telephone: 702-598-6011

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telephone: 609-292-2885

NEW MEXICO

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University of New Mexico
Annual report
Technology Applications Center
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telephone: 505-277-3622

NORTH CAROLINA

Mr. Steven Conrad
Division of Land Resources
Department of Natural Resources and
Community Development
P.O. Box 27687
Raleigh, North Carolina 27611

FTS: 919-733-3833

OREGON

Mr. John D. Beaulieu, Chairman
State Map Advisory Committee
Deputy State Geologist
Department of Geology and
Industries
1069 State Office Building
Portland, Oregon 97201

(reorganized 1983)
Annual report

South Carolina

Dr. Julian Minghi, Chairman
State Mapping Advisory Committee
State Division of Research and
Statistical Services
1028 Sumpter Street, Suite 202
Columbia, South Carolina 29201

SOUTH CAROLINA

Annual report

telephone: 803-758-3604
TEXAS

Annual report
telephone: 915-267-6341

UTAH

Genevieve Atwood, Chairwoman
Utah Mapping Advisory Committee
Utah Geological and Mineral Survey
606 Black Hawk Way
Salt Lake City, Utah 84108

VERMONT

(reinstated 1978)

David Butterfield, Chairman
Vermont Mapping Advisory Committee
Department of Water Resources and
Environmental Engineering
Heritage II, River Street
Montpelier, Vermont 05602

WASHINGTON

Annual report
telephone: 206-753-5338

WISCONSIN

Activities reported in
biennial report of
Wisconsin Geological
& Natural History
Survey
telephone: 608-262-1705

CONTACTS FOR INFORMATION ON INACTIVE STATE MAPPING ADVISORY COMMITTEES

ALASKA

Mr. Phillip Wallick
Department of Natural Resources
Pouch 107035
Anchorage, Alaska 99510

telephone: 907-786-2264

COLORADO

Robert P. Martinez, Cartographer
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1313 Sherman Street, Room 520
Denver, Colorado 80203

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IOWA
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Coop Coordinator
Iowa Geological Survey
123 North Capital Street
Iowa City, Iowa 52242
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MICHIGAN
Mr. Robert Reed
Geological Survey Division
Michigan Dept. of Natural Resources
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Lansing, Michigan 48909
telephone: 517-373-0977

MINNESOTA
Mr. Donald P. Yaeger
Minnesota State Planning Agency
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7th and Robert Streets
St. Paul, Minnesota 55101
telephone: 612-297-2490

WYOMING
Mr. George Christopulos
State Engineer
Barrett Building
telephone: 307-777-7354
Cheyenne, Wyoming 82001

One nautical mile
URBAN MAPPING CATALOG

Catalog of Large-scale urban mapping

One of the most neglected areas of map information is engineering-level city mapping. The importance of this resource is rising, yet there has never been a catalog available which details such products. Since most of our member libraries are in large cities, by working together we can create just such a catalog.

Please try to fit all of the data about your urban area on one sheet of paper so that we can each xerox it in turn and gradually create a binder catalog. Being open-ended, this catalog will have room for data sheets worldwide. If, for any reason you should obtain such information outside the U.S., please send it along to be published. Also, there is no time constraint on this material. All historic epics can be included. If you should manage to find an index sheet, we will try to reproduce that, too.

I am enclosing a sample page for the City of San Diego, both as a first submission and as a model which can be freely imitated and improved on.

The Editor
SAN DIEGO, CALIFORNIA

San Diego City Engineering and Development Department
Mapping Section
1222 First Avenue
San Diego, CA 92101
Telephone (619) 236-6083

11/1/84

1. PRODUCTS

<table>
<thead>
<tr>
<th>SCALE</th>
<th>SIZE</th>
<th>NUMBER OF SHEETS</th>
<th>TYPE</th>
<th>PRICES</th>
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<tr>
<td>1:1,200</td>
<td>24&quot; X 36&quot;</td>
<td>1,500</td>
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<td>sewer map/</td>
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<td>1:1,200</td>
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<td>drainage map/</td>
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</table>

The base 1"=100' series is updated as changes occur. The series gives incomplete coverage of San Diego; new sheets are added when subdivision occurs. Most new activity is around the already developed periphery. As new sheets are added, they too are revised when any new development occurs, i.e. new streets, buildings, as are the secondary sets if and when the change is relevant, i.e. grading, water or sewer pipe additions, zoning changes, etc. Since revision is continuous, each sheet reflects the cumulative changes within its boundaries. There is no known historic archive of all sheets showing all changes. The base sheets are blow ups of the 1"=200' series. Master set is on stable base film.

<table>
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<tr>
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<td>800</td>
<td>base topo map</td>
<td>$6.00 - $1.00</td>
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<tr>
<td>1:2,400</td>
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<td>orthophoto map</td>
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<td>800</td>
<td>base topo w/photo</td>
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The base 1:2,400 series is updated to reflect significant cumulative surface changes telegraphed through the building permit process, supplemented by periodic aerial photo revision. The topographic base and the orthophoto base are merged into a hybrid series containing both. Master sheets are translucent stable-base mylar. Series title is City of San Diego, Metropolitan Topographic Survey; this merges with the County Topo Survey.

<table>
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<td>200</td>
<td>base topo map/</td>
<td>$10.00 - $2.00</td>
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<td>1:4,800</td>
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<td>census tracts/</td>
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<td>1:4,800</td>
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<td>200</td>
<td>zoning map/</td>
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The base 1:4,800 series is a reduction of the 1:2,400 series.

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<tr>
<td></td>
<td>(1&quot;=1,000')</td>
<td></td>
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</table>

This series is the only one not a "legal document," i.e. it does not have to meet stringent accuracy standards.
DEPOSITORY MATTERS

With the change of distribution arrangements for U.S. mapping, this seems a proper time to establish a forum on depository issues. One obvious concern, for instance, is representation. Just when our own Cartographic Users Advisory Council has proven itself an effective advocate for group interests, a new turn in the maze appears. Therefore, we will use this space to bring you information from on high, and hope you will use it to recommend, cajole and improve liaison with all map depository authorities in the U.S. and Canada primarily, but it would be helpful to know about such arrangements worldwide, for comparative purposes. Please send your comments or questions to The Editor for publication in this column.

Government Printing Office
Depository Library Council

The Chair of the Depository Library Council to the Public Printer has asked that issues of concern be addressed to Council Members; map collections, more than ever now, are members of that constituency. So, herewith are the Members:

Chairperson:
Ms. Sandra K. Peterson
Documents Librarian
Government Documents Center
Seeley G. Mudd Library
Yale University
P.O. Box 2491, Yale Station
New Haven, CT 06520
(203) 436-0176

Chairperson-Elect:
Ms. Jennie B. Cross
Assistant Director
Educational Resource Center
Oakland Schools
2100 Pontiac Lake Road
Pontiac, MI 48054
(313) 858-1969

Secretary:
Mr. Richard H. Nicoles
Senior Libr/Government Docs.
California State Library
P.O. Box 2037
Sacramento, CA 95809
(916) 322-4572

Mr. Dennis L. Bruce
Director
Spartanburg County Public Lib.
P.O. Box 2409
Spartanburg, SC 29304-2409
(803) 596-3507

Ms. Marian Carroll
Government Publications Libr.
Milner Library
Illinois State University
Normal, IL 61761
(309) 438-7441

Ms. Mildred Mason
2555 Pennsylvania Avenue, NW
Apartment 411
Washington, D.C. 20037
(202) 452-4470
Have those 1:250,000 series maps of the Mississippi Valley been giving you fits? Or, have you done with them what you did with the 7.5-minute quadrangle maps of forests recently sent by GPO, namely, subsumed them in a larger set? Consider the following: [from GPO Administrative Notes v5n11-8/84 page 3]

CLASSIFICATION OF MISSISSIPPI RIVER MAP SET

We have been receiving a number of inquiries recently regarding the Corps of Engineers extensive map set "Maps of the Alluvial Valley of the Lower Mississippi River and Tributaries," classed D 103.49/3:M 69/grid no./series no., item 0334-C-01. Librarians are experiencing some difficulties in relating the classification numbers on the shipping lists to the actual map sheets in the shipments. In order to identify each map fully by grid designation and series you must refer to the location diagram and MRC map series diagram located in the lower margin of each map.
The grid designation is straightforward, with the area depicted by the individual sheet being heavily outlined on the diagram. Interpretation of the series diagram is more subtle. By using the features, which run vertically on the diagram, against the series numbers, which run horizontally, you should be able to read off the series of the sheet in hand.

For example, if the features column is color-keyed indicating the presence of the elements culture, drainage, primary roads, relief, and woodland, you can determine that the sheet is series 3, based on comparison to the series 3 column on the diagram.

[for an example, see Administrative Note cited above]

So much for the good news, now for the bad ........

DMA MAP UPDATE

The Defense Mapping Agency has informed LPS that Series M305 - Official Road Maps for Allied Forces (SuDoc Class number D 5.342: item number 0379-F-14) has been discontinued. This title appeared on Survey 83-11, Shipping List 18,142, dated June 24, 1983. The item number 0379-F-14 will become inactive.

USGS WATER RESOURCES INVESTIGATIONS FOLDERS DISCONTINUED

Shipping List 18,143, Survey 83-12, dated June 24, 1983, page 3 of 9, showed availability of Water Resources Investigations Folders. The U.S. Geological Survey has informed us that publication of this title has now been discontinued. Those libraries who selected this title can write to the Hydrologic Information Unit, U.S. Geological Survey, 420 National Center, Reston, VA 22092. The HIU answers general questions about U.S. water resources, and will direct libraries to the appropriate USGS district office for availability of State Activities Reports that contain new or updated information that was previously published in the Water Resources Investigations Folders.

The foregoing items were culled from Administrative Notes. If you would like your own copy, contact your Depository Council representative, or, write to Library Programs Service, GPO, Washington, D.C.

If you need to scan the depository literature for articles on maps, try Index to U.S. Government Periodicals, "a computer-generated guide to 175 selected titles by author and subject," published quarterly and cumulated annually by Infodata International Inc., Suite 4602, 175 East Delaware Place, Chicago, IL 60611. The first quarter 1984 issue carried eight items under MAPS and mapping.

The index does not cover those literature services which publish their own abstracts, such as NASA's Scientific and Technical
Aerospace Reports (STAR), NTIS's Government Reports Announcements, and ERIC's Research in Education.

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BUREAU OF LAND MANAGEMENT IN CALIFORNIA

For those who have established depositories with their state BLM offices to receive Minerals Management and Surface Minerals Management, the California experience may be instructive. After a patron pointed out that we were missing a published sheet, and after receiving a bill for it when it was claimed, the following policy statement was obtained: California libraries with established depositories are still eligible for the maps, free. "However, [BLM has] discontinued the automatic mailing of the new maps. [BLM receives] ...only three or four maps each year and anticipate[s] all remaining maps will be printed and available by October 1986."

"... If members of the school system require more than one copy of any map, the charge is $3.25, ... and any order which exceeds $20.00 will be discounted by 25 percent."

Sincerely,

Herman J. Lyttge, Chief
Records and Information Section
California State Office, BLM
2800 Cottage Way
Sacramento, CA 95825

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SOIL CONSERVATION SERVICE


---------------------------------------------
RULES OF THE GAME ARE STRICT WHEN IT COMES TO STREET NAMES

by

Shirley Thayer

[Reprinted, with kind permission of the author, from The Times-Advocate – Saturday, Escondido, California, Saturday, Aug. 25, 1984, pp. A1-A2]

According to William Shakespeare, a rose by any other name would smell as sweet. But according to city governments, a street by any other name is probably a private road or a cul de sac.

In a street name, the suffix ("place," "avenue," etc.) usually denotes the type of roadway.

In Escondido, names with the "street" suffix must be "through streets, 50 feet or more in width, running in a northerly and southerly direction," according to the rules followed by the planning department.

"Glen" denotes a private road, "place" a cul de sac and "drive" a "winding street generally following the natural topography of the land."

In the city of San Diego, "Place," "Point," "Terrace," "Court" and "Cove" are cul de sacs or short loop streets where both ends of the road can be seen when driving on them, said Bob Kausch, street name coordinator.

A lot of thought and effort goes into street naming – and renaming. Although in earlier days naming a street was a pretty informal practice, as cities grew the process was formalized and codified. Cities ponder "What's in a name?" a lot more than Shakespeare ever did.

According to Jonathon Brindle, an associate planner for Escondido, there have been guidelines for suffixes since the 1960s. Consistency makes planning easier. It also helps emergency service providers – which is really the name of the game.

Although rules and procedures for naming streets may vary, the first goal is always the same: getting emergency equipment to a
readily identifiable location as quickly as possible.

Cities generally agree that a street name should be easy to pronounce, have a conventional spelling, not be the same as another in a bordering area or as an existing street with a different suffix.

Cities avoid street names that are very close in sound or spelling to existing ones. Names are checked for double meanings or unpleasant connotations. Special care is taken with names in a foreign language.

In Escondido, the planning department is responsible for approval of street names. For several years, the city has simplified the process by supplying a list of approved names to developers.

Of course, names not on the list may be used, but the city supplies the proper suffix, and the selection must be approved by the planning department.

San Marcos adopted its street naming and renaming policy in 1979, spelling out each rule and step in a 17-page manual. Poway's policy was adopted by the City Council shortly after incorporation in 1980.

Poway tries to avoid numerical and alphabetical names because they are easy to mispronounce or misunderstand and difficult to remember, especially in an emergency. The city also avoids unconventional spelling of common words, and names beginning with silent letters, such as "Knock."

In Vista, contractors submit three name choices for each street, and the planning department reviews the selections with emergency services providers. Not everyone accepts it as an honor to name the streets in his development.

"Some contractors say, 'I can't think of any; you name them for me,'" said Jack Larimer, Vista's associate planner.

Most cities either forbid or discourage using the names of living persons for street names. It helps avoid strange sounding or "cutesy" names, according to John Bridges, a senior planner in Poway. San Diego neither encourages nor discourages the practice.

When it comes to street names, changing your mind can be a difficult - and expensive - process. No matter where you live, if you want to change the name of your street, you'd better have a good reason.

It's also necessary for a majority of your neighbors to feel the same way. Not only do they have to be dissatisfied with the existing name, they must agree with your selection of a new one. Cities prefer obtaining the consent of all property owners, but a simple majority may suffice.
Sometimes the request comes from a department providing emergency services. The request may be to eliminate a duplication of names or names that are similar in sound or spelling to each other.

In Escondido and Poway, a petition containing the signatures of at least 60 percent of property owners must be submitted to the planning department. In San Diego, the petitioner must present a petition signed by all of the property owners indicating that they are aware of the proposed change and stating whether they support or oppose it.

The city councils must approve a resolution before the change is official.

"It's not done often - I've only seen it twice in four years," said Escondido's Brindle.

In one of the changes, Ambition Glen became Concerto Glen, he said. Property owners didn't like the original and didn't think it fit in very well with other streets in the tract, which had a musical theme.

Algiers Street went through the process only to clarify its suffix, which was listed as both a street and an avenue, depending on where in the county assessor's book you were looking.

Although most cities will notify property owners of a proposed change by mail, in San Marcos signs are posted along the road every 300 feet, so that anyone with any possible interest in the change will be aware of it, said Alan Schuler, assistant city planner.

In all cases, the city takes responsibility for notifying the affected agencies, such as the post office, safety agencies, tax assessor and collectors, and public utilities. In San Diego there are 28 different agencies to notify, according to Kausch.

While most cities charge some sort of nominal filing fee for street name changes, in the city of San Diego it's an expensive procedure.

There is an initial $300 filing fee, but that can be small change compared with the other cost borne by the petitioner: the replacement of street signs, including freeway signs. "Sometimes it's expensive and discourages a lot of people," Kausch said.

Several years ago, someone wanted to change the name of Imperial Avenue. "As you know, that's quite a long street and crosses the freeway several times," Kausch said. When the overall cost for sign changes was calculated, it came to about $250,000. "Needless to say, they decided they'd live with Imperial Avenue," Kausch said.
Names [continued]

The eighth Western States Geographic Names Conference was held at Bijou, California, October 4th - 6th, 1984. Significant proposals included naming Sierra Nevada peaks for the photographer Ansel Adams and historian-novelist George R. Stewart. Mount Ansel Adams would name an 11,760-foot-high peak in the southern part of Yosemite National Park; Stewart Peak is just west of Donner Lake. Stewart's Ordeal by Hunger told of the ill-fated Donner party. The Conference also considered naming a Tahoe basin peak after mountaineer Jack Smith. [from Associated Press, and Topo West 17(4) Sept. 1984, p.2]

Federal Information Processing Standard 10, edition 2, (FIPS 10-2), Countries, Dependencies, and Areas of Special Sovereignty —

Change 15, June 1, 1984:

Brunei -- became independent January 1, 1984

West Bank -- All of the area west of the Jordan River under Jordanian administration before the 1967 Arab-Israeli War.

Change 16, August 26, 1984:

Upper Volta -- name changed to Burkina Faso by Presidential decree, August 4, 1984. Short-form of the country name will be Burkina.

To get on the mailing list for changes to FIPS 10-2, contact the Standards Processing Coordinator (ADP), Bureau of Standards, Gaithersburg, MD 20899. To get a copy of the base document, try your local GPO Depository, GPO, or Office of the Geographer, Department of State, Washington, D.C. 20520.

Other FIPS titles on geographic names include:

FIPS 5 States and Outlying Areas of the U.S.

FIPS 6-3 Countries and County equivalents of the States of the United States and the District of Columbia. (for sale by NTIS, Document Sales, 5285 Port Royal Road, Springfield, VA 22161. (tel) 703/487-4650.

FIPS 8-4 Standard Metropolitan Statistical Areas. (available from GPO, Washington, D.C. 20402)

FIPS 55 Codes for named populated places and related entities of the States of the United States. (also available on computer tape; contact NTIS.)
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, we've 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 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.

[Data User News 19(9) September 1984 p. 10]
Names [continued]

Mexico. Secretaria de Programacion y Presupuesto.
Nomenclator de [name of estado] 198-.

Series of Mexican state gazetteers, based on the 1:50,000 national topographic map series.

According to InfoWorld (The Newsweekly for Microcomputer Users), May 21, 1984 Issue (Vol. 6, #21, pp. 25-26), reporter Peggy Watt describes a project of Nora and Dick Dauenhauer to preserve the native language of the Alaskan tribes: Tlingit, Tsimshian, and Haida. Working with the Sealaska Heritage Foundation, they are encoding native alphabets onto an EPROM (erasable programmable read-only memory) chip. The EPROM used is Pascal based and runs on an Apple IIe. Graphics are used in teaching young students their native language.

Dick Dauenhauer indicates that he is "working on [a program] for place names that includes the history of the areas."

Publications

Loewenstein, Louis K. Streets of San Francisco: The Origins of San Francisco's Street and Place Names. San Francisco: Lexikos, 1984. Order from: Lexikos; 703 Market Street, Room 208; San Francisco, CA 94103. $5.95

Origins and facts about more than 1,200 streets and places.

Bockstoece, John R., and Charles F. Batchelder

INDEX TO GEOLOGIC MAPPING OF NEVADA
7.5- & 15-MINUTE QUADRANGLES
IN SELECTED U.S.G.S. SERIES

1983 SUPPLEMENT

by

Jean Slemmons Stratford

The following index is based on Joe Crotts' "Geologic Map Index to USGS 7.5' and 15'-Quadrangles of California". It supplements the "Index to Geologic Mapping of Nevada 7.5- & 15-Minute Quadrangles in Selected U.S.G.S. Series, 1879-1982" which was published in two parts in the WAML Information Bulletin. The index provides access to geologic maps of Nevada at a scale of 1:125,000 or greater which appear in seven current U.S.G.S. series: Bulletin (1883- ), Geologic Quadrangle Map (1949- ), Geophysical Investigation Map (1946- ), Miscellaneous Field Studies Map, previously titled: Mineral Investigation Field Studies Map (1950- ), Miscellaneous Investigation Map, previously titled: Miscellaneous Geologic Investigation Map (1955- ), Professional Paper (1902- ), and Water Supply Paper (1896- ).

This supplement includes maps published in these series in 1983. Citations for newly mapped topographic quadrangles, previously omitted from the index, are also included here. Only geologic maps are included; related types of thematic maps such as aeromagnetic and gravity maps are not indexed. In addition, coverage provided by the Crotts Index is not duplicated here. For quadrangles covering both states, the two indexes should be used in conjunction with one another.

The index is arranged alphabetically according to quadrangle name as assigned by U.S.G.S. Following each quadrangle name, the size of the quad (either 7.5' or 15') is noted. The map number given in parentheses is the McLane Filing System number for that quad. The McLane Filing System is used by the Mines Library, University of Nevada, Reno, for filing 7.5' and 15' topographic maps of Nevada. Any publications containing geologic maps of the quadrangles are listed in the "Publications" column in chronological order with the date of publication given in parentheses. If the map listed covers only a part of the quadrangle, the "Coverage" column indicates the area of coverage. If no notation has been made in this column, coverage is complete. A key to abbreviations used in this index is given below.
KEY TO ABBREVIATIONS USED

Quadrangle Name & Coverage Columns:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AZ</td>
<td>Arizona</td>
</tr>
<tr>
<td>C.</td>
<td>Approximately</td>
</tr>
<tr>
<td>CA</td>
<td>California</td>
</tr>
<tr>
<td>E</td>
<td>East</td>
</tr>
<tr>
<td>LN</td>
<td>Longitude (West)</td>
</tr>
<tr>
<td>LT</td>
<td>Latitude (North)</td>
</tr>
<tr>
<td>MT</td>
<td>Mount</td>
</tr>
<tr>
<td>MTNS</td>
<td>Mountains</td>
</tr>
<tr>
<td>N</td>
<td>North</td>
</tr>
<tr>
<td>NE</td>
<td>Northeast</td>
</tr>
<tr>
<td>NO</td>
<td>Northern</td>
</tr>
<tr>
<td>NV</td>
<td>Nevada</td>
</tr>
<tr>
<td>NW</td>
<td>Northwest</td>
</tr>
<tr>
<td>OR</td>
<td>Oregon</td>
</tr>
<tr>
<td>PL</td>
<td>Plate</td>
</tr>
<tr>
<td>PART</td>
<td>a portion of/portions of</td>
</tr>
<tr>
<td>R</td>
<td>Range (U.S. Land Survey)</td>
</tr>
<tr>
<td>S</td>
<td>South</td>
</tr>
<tr>
<td>SE</td>
<td>Southeast</td>
</tr>
<tr>
<td>SEC</td>
<td>Section (U.S. Land Survey)</td>
</tr>
<tr>
<td>SW</td>
<td>Southwest</td>
</tr>
<tr>
<td>T</td>
<td>Township (U.S. Land Survey)</td>
</tr>
<tr>
<td>W</td>
<td>West</td>
</tr>
<tr>
<td>/2</td>
<td>half (7.5' x 15' quad)</td>
</tr>
<tr>
<td>/4</td>
<td>quarter (7.5' quad)</td>
</tr>
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</table>

Publications Column:

<table>
<thead>
<tr>
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<th>Description</th>
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<tr>
<td>B</td>
<td>Bulletin</td>
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<tr>
<td>GP</td>
<td>Geophysical Investigation Map</td>
</tr>
<tr>
<td>GQ</td>
<td>Geologic Quadrangle Map</td>
</tr>
<tr>
<td>I</td>
<td>Miscellaneous Investigation Map</td>
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<tr>
<td>MF</td>
<td>Miscellaneous Field Studies Map</td>
</tr>
<tr>
<td>P</td>
<td>Professional Paper</td>
</tr>
<tr>
<td>W</td>
<td>Water Supply Paper</td>
</tr>
</tbody>
</table>

NOTES


(3) New quadrangles were identified in U.S. Geological Survey, Index to Topographic Maps of Nevada. Reston, VA: U.S.
G.S., March 1, 1984.

(4) Mary B. Ansari, "A Simple Numeric Filing System for 7.5- and 15-Minute Topographic Maps: The McLane System," Western

<table>
<thead>
<tr>
<th>QUAD NAME/SIZE (NUMBER)</th>
<th>PUBLICATIONS</th>
<th>COVERAGE</th>
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</table>
| ADELAIDE 7.5' (106D)    | GQ 11 (1951) | LT 40°50'35"-40°52'30"
                        | W 1754 (1964) | LN 117°30'-117°37'30"
                        | GQ 656 (1967) |                        |
| BARRETT SPRINGS 7.5' (81C) | W 1754 (1964) | |
| BENTON 15' (374)        | MF 1400C (1983) | LT 37°50'-38°
                        |               | LN 118°15'-118°25' |
| BLOODY RUN PEAK 7.5' (81A) | W 1754 (1964) | LT 41°07'30"-41°08'04"
                        |               | LN 117°45'-117°52'30" |
| BLUE DIAMOND 15' (471)  | MF 1522 (1983) | LT 36°-36°10'
                        |               | LN 115°25'-115°30' |
| BLUE DIAMOND 7.5' (471C) | MF 1522 (1983) | LT 36°-36°10'
                        |               | LN 115°25'-115°30' |
| CARLIN 15' (136)        | MF 1546 (1983) | PART T31N R53E
                        |               | PART T32N R53E |
| CARLIN NE 7.5' (134A)   | MF 481 (1972) | |
                        | P 867A (1975) | |
                        | P 867B (1976) | |
                        | I 1028 (1928) | |
| CHINA GARDEN 7.5' (82B) | W 1754 (1964) | LT 41°07'30"-41°08'04"
                        |               | LN 117°37'30"-117°45' |
                        | W 1795 (1965) | C.LT 41°07'30"-41°08'04"
                        |               | C.LN 117°37'30"-117°45' |
| CORRAL WASH 7.5' (299B) | GQ 40 (1954) | |
| DAVIS MTN 15' (375)     | MF 1400C (1983) | LT 37°50'-38°
                        |               | LN 118°05'-118°15' |
| DIXIE FLAT 15' (137)    | MF 1546 (1983) | PART T31N R53E
<pre><code>                    |               | PART T32N R53E |
</code></pre>
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<th>COVERAGE</th>
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<tr>
<td>DRY CANYON 7.5' (321D)</td>
<td>GQ 40 (1954)</td>
<td>PART T34N R36E</td>
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<tr>
<td>DUN GLEN PEAK 7.5' (105C)</td>
<td>B 940A (1943) GQ 11 (1951) W 1754 (1964)</td>
<td>LT 40°50'35&quot;-40°52'30&quot; LN 117°52'30&quot;-118° W 1795 (1965) C.LT 40°50'35&quot;-40°52'30&quot; C.LN 117°52'30&quot;-118°</td>
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<tr>
<td>GARRISON 15' (312)</td>
<td>MF 1343B (1983)</td>
<td>LT 38°45'-39° LN 114°05'-114°15'</td>
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<td>GOLCONDA BUTTE 7.5' (82D)</td>
<td>W 1754 (1964) W 1795 (1965)</td>
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<tr>
<td>GUMBOOT LAKE 7.5' (82A)</td>
<td>W 1754 (1964) W 1795 (1965)</td>
<td>LT 41°07'30&quot;-41°08'04&quot; LN 117°30'-117°37'30&quot; W 1795 (1965) C.LT 41°07'30&quot;-41°08'04&quot; C.LN 117°30'-117°37'30&quot;</td>
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<td>LA MADRE MTN 7.5' (471B)</td>
<td>MF 1522 (1983)</td>
<td>LT 36°07'30&quot;-36°10' LN 115°25'-115°30'</td>
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<tr>
<td>LATHROP WELLS 15' (449)</td>
<td>I 1361 (1983)</td>
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<tr>
<td>LATHROP WELLS 7.5' (449B)</td>
<td>I 1361 (1983)</td>
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<td>MTN SPRINGS 15' (470)</td>
<td>MF 1522 (1983)</td>
<td>LT 36°-36°10' LN 115°30'-115°35'</td>
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<td>POLE CREEK 7.5' (106A)</td>
<td>GQ 11 (1951) W 1754 (1964) W 1795 (1965) GQ 656 (1967)</td>
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<td>ROSE CREEK 7.5' (105B)</td>
<td>GQ 11 (1951) W 1754 (1964) W 1795 (1965)</td>
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<td>ROSE CREEK MTN 7.5' (105D)</td>
<td>B 940A (1943) GQ 11 (1951) W 1754 (1964)</td>
<td>LT 40°50'35&quot;-40°52'30&quot; LN 117°45'-117°52'30&quot; W 1795 (1965) C.LT 40°50'35&quot;-40°52'30&quot; C.LN 117°45'-117°52'30&quot;</td>
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<td>QUAD NAME/SIZE (NUMBER)</td>
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<td>COVERAGE</td>
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<td>---------------------------------------------</td>
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<tr>
<td>SACRAMENTO PASS 15' (287)</td>
<td>MF 1343B (1983)</td>
<td>LT 39°-39°05'</td>
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<td></td>
<td></td>
<td>LN 114°15'-114°25'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PART T25N R24E</td>
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<tr>
<td></td>
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<td>SEC 24, 25, 36</td>
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<td></td>
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<td>PART T25N R25E</td>
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<td>SEC 19, 30, 31</td>
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<td>SAGE HEN SPRING 7.5'</td>
<td>B 936B (1942)</td>
<td>PART T24N R24E</td>
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<td>(172C)</td>
<td></td>
<td>SEC 21, 22, 25</td>
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<tr>
<td>SILVER STATE DRAW 7.5'</td>
<td>W 1754 (1964)</td>
<td>LT 41°07'30''-41°08'04''</td>
</tr>
<tr>
<td>(818)</td>
<td></td>
<td>LN 117°52'30''-118°</td>
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<tr>
<td>SONOMA CANYON 7.5' (106C)</td>
<td>GQ 11 (1951)</td>
<td>LT 40°50'35''-40°52'30''</td>
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<tr>
<td></td>
<td>W 1754 (1964)</td>
<td>LN 117°37'30''-117°45'</td>
</tr>
<tr>
<td></td>
<td>GQ 656 (1967)</td>
<td></td>
</tr>
<tr>
<td>STRIPED HILLS 7.5' (449A)</td>
<td>MF 1361 (1983)</td>
<td></td>
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<tr>
<td>TOIYABE PEAK 7.5' (299A)</td>
<td>GQ 40 (1954)</td>
<td></td>
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<tr>
<td>WESO 7.5' (82C)</td>
<td>W 1754 (1964)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W 1795 (1965)</td>
<td></td>
</tr>
<tr>
<td>WHEELER PEAK 15' (311)</td>
<td>MF 1343B (1983)</td>
<td>LT 38°45'-39°</td>
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<tr>
<td></td>
<td></td>
<td>LN 114°15'-114°25'</td>
</tr>
<tr>
<td>WINNEMUCCA EAST 7.5'</td>
<td>GQ 11 (1951)</td>
<td>C.LT 40°55'-41°</td>
</tr>
<tr>
<td>(106B)</td>
<td>W 1754 (1964)</td>
<td>C.LN 117°37'30''-117°45'</td>
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<td></td>
<td>W 1795 (1965)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GQ 656 (1967)</td>
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<tr>
<td>WINNEMUCCA MTN 7.5' (81D)</td>
<td>W 1754 (1964)</td>
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<td>WINNEMUCCA WEST 7.5' (105A)</td>
<td>GQ 11 (1951)</td>
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<td>W 1754 (1964)</td>
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<tr>
<td></td>
<td>W 1795 (1965)</td>
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</tbody>
</table>
--- Milestones ---

Distribution of USGS and DMA maps as part of the U.S. Government Printing Office's Federal Depository Library Program was (tentatively) inaugurated October 1, 1984 to the 1,300 eligible libraries served.

USGS will retain, for a period of 60 days after shipment, sufficient quantities of each item shipped to Federal depository libraries to cover claims for items not received.

For USGS maps never received and replacements for maps missing from a collection or damaged (through heavy use, etc.) to the extent that they are no longer serviceable, and for miscellaneous requests or questions, write:

Chief, Product Distribution Policy Office  
U.S. Geological Survey  
National Mapping Division, MS 508  
12201 Sunrise Valley Drive  
Reston, Virginia 22092

For DMA maps never received and lost shipments (after a 60-day period), special claims, and replacements, and for miscellaneous requests or questions, write:

Director  
DMA Hydrographic/Topographic Center  
6500 Brookes Lane  
ATTN: SDSI  
Washington, D.C. 20315

For address changes and changes to product selection, write:

Director, Library Programs Service  
Government Printing Office  
5236 Eisenhower Avenue  
Alexandria, Virginia 22304

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If you are somehow not receiving small-format CIA maps through the GPO depository system, or the Library of Congress' Documents Expediting Service (DocEx), they are also available from the National Technical Information Service. For further information, contact NTIS Subscriptions, Springfield, VA 22151 (tel. 703/487-4630)
0.S. Completes Remapping of Britain

The postwar large-scale remapping of Great Britain by the Ordnance Survey has recently been completed. The last sheet to roll off the press was of Eskdale in southern Scotland (NY 2498). There are now 55,000 urban maps at 1:1,250; 160,000 rural maps at 1:2,500; and 4,000 basic scale mountain and moorland maps at 1:10,000.
[SUC Bulletin 17(2) 1984]

Aerial Photography of Great Britain

The Central Register of Air Photography for England has transferred its functions. For RAF coverage, contact:

Ministry of Defense f 6T2 (Air)
St. George's Road
Harrogate, North Yorkshire
England HG2 9DB

For OS 1951- coverage, contact:

Air Photo Cover Group
Ordnance Survey
Ramsey Road
Maybush, Southampton
England SO9 4DH

Directorate of Overseas Surveys

The Directorate of Overseas Surveys (DOS) became a directorate within the Ordnance Survey, April 2, 1984.
[SUC Bulletin 17(2) 1984]

[If you have contributions to

Milestones

please forward them to the Editor.]
SOFTWORLD
Computers in the Map Room

Second of A Series Guest Author:

Larry Cruse

Note from the Editor: This is the second in a series on computer cartography and the map library. The relationship of these two is becoming more prominent in the life of the library and featured here will be articles that focus on products and applications suitable for a map collection environment.

Western Computerized Mapping Organizations

U.R.I.S.A. - The Urban and Regional Information Systems Association held its 22nd annual meeting in Seattle August 11-15, 1984. URISA brings together local, state and regional computer specialists to deal with applications problems and planning. One of their special interest groups concerns itself exclusively with geo data bases. This lead to such agenda items as an overview of Bellevue's Automated Mapping and Planning System project and Tacoma's Geographic Based System, and visits to Geosystems Software Incorporated as well as King County's METRO Computer Center to review their geographic information systems, and Northwest Cartography. "Land Records" venues included four talks on computer related mapping, and the one on "Geographic Information Systems" had thirty-seven. For a copy of the Proceedings, or to join, contact Louise W. Taylor, URISA, 1340 Old Chain Bridge Road, Suite 300, McLean, VA 22101 (tel.) 703/790-1745.

U.R.I.S.A. also holds regional meetings, such as October 16ths at the Denver Regional Council of Governments. This meeting was concerned with the exchange of land information amongst data users. It is to be followed by meetings on November 13, May 15, June 25, July 24, and September 4th.

The USGS Rocky Mountain Mapping Center is very active in the local URISA. Bob Alexander of the National Mapping Division has been instrumental in developing the Cooperative Land Information Network in Colorado, in many ways the summation of URISA objectives. Bob sent me a copy f the final report issued last summer on a survey and conference which tried to particularize the organization of machine-readable land records. Unfortunately, map
librarians have not actively involved themselves in such emerging networks sufficiently, although URISA and USGS RMMC are doing their best to reach out. But they need feedback from non-professional user advocates such as map librarians on how to package cartographic data.

If you are within the Rocky Mountain National Mapping Division URISA region, I urge you to contact Bob Alexander, Research Geographer, Geological Survey, Box 25046, MS 510, Denver Federal Center, Denver, CO 80225 for your mutual benefit.

I discovered the Colorado project in the newsletter of the Southern California Computer Aided Mapping Association, Box 3249 Terminal Annex, Mail Location 731 A, Los Angeles, CA 90051. SCCAMA shares concerns with URISA but is autonomous of it. Their next meeting will be November 29th to discuss higher education mapping needs.

One of SCCAMA's continuing concerns is organizing computerized mapping at the international level through similarly organized local groups, such as the Bay Area Automated Mapping Association (BAAAMA), Northwest Computer Aided Mapping Association (NWCAMA) as well as similar associations in Japan and England. Subchapters of these regionals are also forming at the county level -- at least in Southern California --, so there are no limits on the opportunities to get involved.

Meanwhile, if you are aware of any other such local interest groups, please pass along the information to me for sharing.

Section 6 of the U.S. National Report to ICA, in the 1984 Special Issue of The American Cartographer includes "Organizations and Literature on Automated Mapping," by James R. Carter. It provides a solid base from which to start.

Literature

Microcomputers for Information Management: "An International Journal for Library and Information Services" was launched in March. The June issue (no. 2) included a thorough review of "Storage Technology: Present and Future," by Charles M. Goldstein, of possible interest to map librarians concerned with sorting out the proliferation of memory devices. Personal/institutional subscriptions are available for $28.50 - $59.50 from Ablex Publishing Corporation, Norwood, NJ 07648.

"Maps on Micros" by David Unwin, appeared in Journal of Geography in Higher Education 6, 1982, pp. 163-169. Three software packages are reviewed: "Topographic Mapping Programs," "CAC/APPLE," and "APPLEPIPS." According to the author, "We have now reached the point at which microcomputers are so cheap, yet good educational software is so rare that equipment purchases could, and perhaps should, be governed by the programs available." All three
packages are available from U.S. sources (see "Software").

"Thematic mapping using microcomputers," (conference at the Department of Geography, University of Leicester, December 1983), is reported on by T. Fearnside. *SUC Bulletin* 17(2): 85-86. "... this session demonstrated the almost complete lack of commercial software written for mapping on desk top computers ... A full report of the proceedings is to be produced in a special issue of *Computers and Geosciences* ...."

Software - Directories


Databases

Microcomputer index is a new literature database devoted exclusively to microcomputers. About 150 magazines are selectively abstracted, as are the micro products of 3,000 hardware and software producers. Growing at 200 - 300 records per week, the database now contains 16,000 abstracts. The bimonthly print version is $45 per year. On line, this index can be accessed through The Source, or DIALOG's "Knowledge Index."

Collectors Data Service is a buy/sell database available through Tymnet. Additional services include newsletters by item type, show dates, calendars of events, glossaries, auction schedules, prices, and stolen properties lists. Collector's Data Service, Ltd., 420 West Mercer, Seattle, WA 98119. (tel.) 206/ 281-7273.

6,000 microcomputer software packages are analyzed online by Data Resources, Inc. and GML Corp. For further information, contact Christina Huston, DR1, 24 Hartwell Ave., Lexington, MA 02173. (tel.) 617/ 863-5100.

Donnelley Demographics is now available online through DIALOG. Geographic breakdowns are available by state, county, SMSA, Areas of Dominant Influence, Designated Marketing Areas, place and ZIP codes.

3,000 software packages are analyzed in the Business / Professional Software Database, available through DIALOG.

R.R. Bowker Company, 205 East Forty-Second St., New York, NY 10017 (tel.) 212/ 916-1600 or toll free 1-800-521-8110 (for orders), is offering a new service providing "information on computers and
computer-related products in its twice-yearly Retailer's Microcomputer Market Place, to be published in February. Listings cover 750 micros, 30,000 programs, 2,800 peripheral products, 300 suppliers, 500 periodicals, 6,000 books and 200 distributors, all of it cross-indexed and cross-matched. Price is $30.

Searchmart Corp. offers the On-Line Software Library. For further information, contact Searchmart Corp., 745 U.S. Highway 1, North Palm Beach, FL 33408. (tel.) 305/845-2996.

The Sitenet database is designed to aid those seeking corporate facilities, but access is free to all. Supporting the database is Geo-Micro, a bimonthly explaining the service. For information, contact Conway Data Inc., 1954 Airport Road N.E., Atlanta, GA 30341. (tel.) 404/458-6026.

The Reader's Guide to Periodical Literature, which indexes maps, will soon be put on-line by H.W. Wilson Co.

According to Ruth S. Smith, Director of NTIS Customer Services, when searching the NTIS database for maps, "maps which are indexed by NTIS ... can be retrieved by using the description "MAP". ...those received from the Defense Technical Information Center, NASA, and the Department of Energy, Technical Information Office ... do not contain the descriptor "MAP". ... at the present time, only the PB numbered maps can be identified as such." [NTIS AD, PB, NASA and DOE reports are available regionally from Information on Demand, Inc., P.O. Box 9550, Berkeley, CA 94709. (tel.) 1-800-227-0750.]

Micro-Software guide & directory is now available on BRS/SEARCH and BRS/After Dark. Reviews all software packages (excluding games and entertainment). Accessed online as file SOFT. The print version is $40 from Micro-Software Guide and Directory, Online, Inc., Dept. SD, 11 Tannery Lane, Weston, CT 06883.

The Public Library Association Task Force

The Public Library Association Task Force on the Use of Microcomputers includes information on users, their equipment and software in the U.S. and Canada. Membership is free for libraries. Application can be made by sending a stamped self-addressed envelope to Carol F.L. Lin, Queens Borough Public Library, 89-11 Merrick Blvd., Jamaica, NY 11432. (tel.) 212/990-0700.

Apple Library Users Group
Apple Inc. maintains this users group for libraries. Their newsletter is available free. Contact: Monica Ertel, Apple Computer, Inc., Corporate Documentation 26B, 20650 Valley Green Drive, Cupertino, CA 95014. (tel.) 408/ 973-2552.

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PROGRAMS

APPLE

"Shore features" is a geographical teaching aid available for $24.95 from Teach Yourself by Computer Software, 2128 W. Jefferson Road, Pittsford, NY 14534. (tel.) 716/ 424-5453.

T.I.

"Gography" is a mini-atlas on diskette with information on every country. It requires a disk drive and extended BASIC module. Price is $22. Contact Data Systems, 2214 W. Iowa St., Chicago, IL 60622 (tel.) 312/ 235-2699.

HITACHI

ALIS (Areal Land Information System) is described by Sachio Kubo in "ALIS: A Geographical Information System for Urban Research", IEEE Computer Graphics and Applications 4(5): 68-76, May 1984: "Micro-ALIS, a downsized version ... can handle most processes ... but with limitations on data size and ... analyses." As a general description of what is involved in geographical information systems on microcomputers, including their relationship to mini-computers and mainframes, it is hard to beat. Micro-ALIS, for instance, has been rewritten in BASIC so that it can be used by virtually all micros.

COMMODORE 64

"Navigation Pac", by Celestial Software, includes great circle, rhumb-line and dead reckoning sailing, latitude by noon sight, latitude by time sight as well as star and planet identification.

IBM PC, XT and compatibles

Strategic Locations Planning's "Atlas" is 2D color, choropleth mapping component ($225) in a family of software and data sets written in DOS 2.0, IBM's proprietary operating system. Atlas supplies 300 patterns, 16 colors and 3 proportionate label sizes. The map "boundary files for it are available in various combinations, including U.S. states (free), counties ($400, hard disc required), congressional districts and advertising regions ($350 each), regions with counties ($150), states with counties ($75), counties with census tracts or ZIPs ($75) and the top-50 SMSAs with tracts or ZIPs ($150 each for proximal files, $250 each
for actual boundaries).

The data sets are from 1980 population census and 1983 projections. These are coincident with the boundary files and range in price from $35 for county census tracts, $75 for states by county, $150 for counties by region and $300 - $400 for all U.S. Counties. The five largest urban centers are also available as packages ranging from $500 - $700 for boundary and data files together.

The maps generated require an expensive plotter to do them justice (our sample was made on a Hewlett-Packard 7475); but plotter technology is advancing and prices tumbling. This is because the boundary files are detailed, and the choropleth routines capable of very fine hachuring.

If you would like a full package of information and map samples, contact Thomas Cook, Strategic Locations Planning, 4030 Moorpark Ave., Suite 123, San Jose, CA 95117. (tel.) 408/985-7400.

Users should compare data set prices against those available from the Census Bureau (see Data User News 19(4):5, April 1984: "County Business Patterns Now on Diskette".

On-line Maps

The Bureau of the Census' Center for International Research issued its International Data Base flyer last May. As part of this service, on-line access to maps of the world by country will be running in January 1985.

For further information, contact Greg Nowakowski, CIR, Scuderi Building, Room 409, Bureau of the Census, Washington, D.C. 20233. (tel.) 301/763-4286.

(I will try to get more on this for the March issue.)

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Sounding Board

(Please notify The Editor if you have an answer. Your response will be printed in "Sounding Board").

* Can anyone decipher the numbering system(s) used in the left lower corner of CIA maps?

* The U.S. Bureau of the Census is currently planning 1990 Census products. Public meetings are now being held
throughout the country. Western meetings occur November 27 in Los Angeles and the 29th in Sacramento. If you can't attend, send your written suggestions to John Kavaliunas, Data User Services Division, Bureau of the Census, Washington, D.C. 20233.

Specific questions being asked include:

Software and Documentation
Should the Census Bureau develop software to access the 1990 computer tape files? Was the technical documentation for the 1980 census files adequate? How useful were the machine-readable data dictionaries? What about the routines for developing profiles? (p. 4)

How useful would microfiche maps be?
Other Media: How should data be packaged for floppy disks/laser disks - for example, by geography or by subject matter? (p. 11)

For more details, consult Data User News from the Bureau of the Census, 19(9) September 1984, in your Documents Dept.

For more background on 1990 Census geography issue papers, contact Virgeline Davis, Geography Division, Bureau of the Census, Washington, D.C. 20233. (tel: 303/763-2364) These papers are the result of the April 1984 National Geographic Areas Conference.

* Is there a publication which shows incorporated cities in rank order by area? Most census reports rank this information only for Urban Areas and Standard Metropolitan Statistical Areas, not incorporated city areas.

* Huntington Surveys recently published a table of the status of mapping in Africa. Is there a table somewhere which details the number of maps needed to cover the world, continents, and countries, at various scales?
LIFE BLOOD OF THE SAN JOAQUIN

D. L. Morgan

Professor of Geography
California State University, Fresno

Introduction

The "life-blood" of the San Joaquin Valley is represented by the "life-giving" water of the San Joaquin River. This brings us to the source of that water and to the chain of events and processes which precede and follow from the flow of that river and of the sister rivers which water the San Joaquin Valley. This chain of physical and human events and the areal distributions involved are the subject matter of geography and make extensive use of a wide variety of maps.

I will approach this subject by presenting some examples of the maps I typically use in the courses which I teach in geography. The emphasis will be on the physical and environmental side of geography as my professional training and experience is in meteorology and hydrology. The courses which I teach regularly, excluding the lower division introductory course in weather and climate, are Climatology, Meteorology, Mountain Environments, Agricultural Climatology, City Environments, and Environmental Pollution.

The Chain of Events

Rain and snow melt furnish the water which cascades down the stream and river channels and flows out onto the valley floor. Sunshine and warm temperatures furnish the energy and provide the excellent environment for plant life to flourish in the generally rich soil of the valley. (The valley soil was transported by the rivers also.) The perfect plant growing conditions of the San Joaquin Valley have attracted a large and vital agro-business with a stable economy and continuous influx of people. The influx of people and the associated technology have caused increased pressures on the environment and have created pollution problems which in turn threaten a reduction in agricultural output both in the San Joaquin Valley and in the adjacent Sierra Nevada.

An illustrated presentation made at the WAML Fall Meeting in Fresno, Oct. 12, 1984.
Climate

Let us begin by examining the climate of the San Joaquin Valley and adjacent Sierra Nevada.

Solar Radiation: the input of energy which drives the weather system and grows the plants.

Reference: The Average Solar Radiation Received at the Ground. (1)

Temperature: mild and stable with few subfreezing hours. Average summer minimums run in the 60's and 70's with maximums in the 90's. Average winter minimums run in the 40's with maximums in the 50's and 60's. The reason killing frosts are rare is the effective blockage of inflow of continental polar air by the Rockies, the Cascades, and Sierra Nevada.

Reference: Winter air masses in North America, Fig. 7.19. (2)

Precipitation: 1) the key, but highly variable from one year to the next.

Reference: Anomalies of precipitation variability in the United States, Fig. 7.22. (2)

2) mean annual amount (10.24" for Fresno), which is generally low.

Reference: Mean Annual Precipita. in mediterranean North America (inches) Fig. 13.11. (3)

Reference: The effect of mountain topography - Fig. 17.15. (4)

3) timing mostly in winter.

Reference: Proportion of yearly precipitation - Fig. 13.15. (3)

Evapotranspiration: must be satisfied or vegetation will die or go dormant

Reference: Average annual potential evapotranspiration - Fig. 12.11. (4) About 40", generally large.

Other Factors: 1) fog in winter - tule fog keeps from freezing.

Reference: Mean # days--dense fog--Fig. 13.13 (3)
2) little hail or snow.

References: Hail days - Fig. 16.10 (3) and Proportion of Snow - Fig. 16.8. (3)

Native Vegetation: the result of climatic and edaphic factors. Ability to withstand the good climatic years and the poor climatic years.

Reference: Mediterranean scrub woodland - Fig. 13.10. (3)

A look at a good year, 1982-1983: 200% of average for Fresno.


230% of average for San Joaquin River Watershed.

Reference: Forecasts of April-July Snowmelt Runoff, April 1, 1983. (5)

Meteorology

Next let us examine what meteorological conditions are favorable for precipitation occurrence in central California.

Warm, moist air: typically flows in from the Pacific Ocean on a south or southwest wind in fall, winter & spring and from the Gulf of California & Gulf of Mexico on a south or southeast wind in summer and fall.

Cool, moist air: typically flows into central California from the Gulf of Alaska on a northwest wind.

Convergence: occurs where these air streams meet causing a lifting of the air with subsequent additional cooling producing clouds and precipitation.


How does the meteorologist look for conditions favorable for rain?

Weather Maps: show air flow patterns, current and predicted.

Reference: 500 mb Analysis 00Z, 9-20-84. (7) 500 mb Forecast Valid, 9-23-84. (7) Surface Weather Analysis, 9-20-84 (7)

Radar Imagery: shows where it is currently raining.

Reference: Radar Summary, Sept. 18 & 20,'84. (7)
Satellite Imagery: shows the clouds (visible) and temperatures (infrared).

Reference: NOAA GOES-W VIS-07/19/84 2115Z. (7)
NOAA GOES-W IR-09/18/84 1200Z. (7)

Outlooks: shows the 30-day outlook for temperatures and precipitation and the expected average flow pattern at 700 mb (10,000 feet).

Reference: Outlook for Mid-September to Mid-October 1984, Mean 700 mb Contum. (7)
Reference: Monthly and Seasonal Weather Outlook for Mid-September to Mid-October 1984 Temperature Probabilities and Precipitation Probabilities. (7)

How can the meteorologist look ahead further into the future than a few days or months? With the recent availability of sea surface temperatures from satellite observations the meteorologist is able to get a better understanding of the tremendous influence which the ocean has on the atmosphere above. The ocean of course is an overwhelming source of heat and water vapor to the atmosphere, which in turn fuels the atmospheric heat engine, which creates the winds and storms, which in turn influence the surface conditions of the ocean. This complex and teleconnected interplay between ocean and atmosphere is gaining some understanding as a result of the recent news making weather associated with the "El Nino" phenomenon. Much interest has been focused on the topic with a relatively good data bank available for research. The results and ideas are still coming forth.

Reference: Ship and Buoy surface observations for June, 1982, December, 1982, and March, 1983. Fig. 6. (8)
Sea surface temperatures from NOAA-7 Satellite April 23, 1982. Fig. 2. (8)
Sea surface temperatures from NOAA-7 Satellite April, 1983. Fig. 3. (8)

Agricultural Climatology

What makes a plant grow where it grows? Sunshine, precipitation, many climatic factors plus soil chemistry, nutrients and other edaphic factors.

Reference: A sketch showing a tree with many environmental factors identified. (9)

Native vegetation give a clue and can serve as an agricultural resource, itself, e.g., timber.
Reference: Personal slide set of cross-section of vegetation up the Sierra slope.

Using certain climatic indicators such as temperature regime, and soil moisture characteristics plus knowledge of how certain crop types respond to climatic and edaphic factors allows mapping of areas where certain crops might be grown successfully.

Reference: Slides of areal distribution for proper growth areas for various crop types. (10)

What is actually grown depends as much or more on economics and politics than on climate or soil. However, whatever is grown in the great San Joaquin Valley depends on a stable and sure source of the "life-giving blood" of the San Joaquin--WATER! And this depends on the ocean and the atmosphere combining processes which can produce and steer the moisture bearing winds into central California and bless the thirsty earth with rain and the barren mountain tops with snow, the source of cascading streams and rushing rivers to water the San Joaquin.

References

10. Gilbert, W.D., 1960's with the University of California Agricultural Extension Service at the University ... Davis.
NEWS NOTES

Contributions from:

PH = Phil Hoehn, University of California, Berkeley
DK = Donna Koepp, Denver Public Library, Denver
RM = Riley Moffat, Brigham Young University, Provo
EP = The Editor, from publishers' blurbs & items in hand
SS = Stanley Stevens, University of California, Santa Cruz

INDEX TO MAPS IN THE U.S. CONGRESSIONAL SERIAL SET, 1789-1969

Donna Koepp, Denver Public Library, is looking for contributing editors to index maps from the Serial Set, beginning with the American State Papers and continuing through 1969. Oryx Press will publish the result. Each contributing editor will be responsible for a selected historical period, and each will be listed as contributing editor in the published book.

Over the next few months, Donna will be establishing guidelines and designing an indexing form. She expects the project to run about two and a half years. Publication will be in late 1987.

If you are interested in joining this project, please contact:

Donna Koepp, Map Specialist
Government Publications Department
Denver Public Library
1357 Broadway (303) 571-2130
Denver, Colorado 80203

UNIVERSITY OF ILLINOIS RECEIVES $120,000 GRANT

According to Bibliol 1984 #3 (Univ. Illinois Map & Geography Library) the University of Illinois has been awarded a $120,000 Title II-C grant from the U.S. Department of Education for the purpose of cataloging its flat map collection and acquiring Latin American materials.

"The grant will allow the Map & Geography Library to revise and update its limited cataloging of maps using OCLC. Approximately 25,000 new titles will be input into the OCLC data base, resulting in an 18% increase of Type E records in OCLC. Work will be level I cataloging and conform to AACR2 standards for cartographic materials. Library of Congress subject headings and classification will be used."
Staff involved in the grant include David Cobb, Map & Geography Librarian, who will serve as Project Director; Patricia Moore, Assistant Special Collections Librarian, who will serve as Project Coordinator; a Senior Cataloger who will catalog Latin American maps; two Cataloger Is who will be assigned other areas, as well as perform copy cataloging; and a Research Assistant.

Work will commence in October 1984 and continue until October 1985 when it is anticipated that continuation funds will be granted for another year. In addition to providing funds for map cataloging and the acquisition of Latin American maps, the grant provides for the acquisition of some 5-drawer unit map cases for the purpose of housing the additional material.

Further information about the grant is available from the Project Director."

"Position Announcement"

The following personnel are need in order to implement work on the Retrospective Map Cataloging Project described above:

Cataloger I (2 positions) Salary: $15,000
Requirements: M.L.S. from Accredited School, knowledge of current cataloging and classification practices. Facility with Western European languages and MARC tagging helpful.

Duties: Revision of non-DLC copy in OCLC, descriptive cataloging of English language materials, preliminary cataloging for other materials, basic authority work.

Senior Cataloger Salary: $18,000
Requirements: Accredited M.L.S., professional experience with AACR2, Library of Congress subject headings and classification, MARC tagging, and authority work. Substantial language skills with the emphasis on Spanish. Knowledge of cartographic formats helpful.


Research Assistant Salary: $10,431
Requirements: Bachelor's degree with some work in a university or research library.

Duties: Copy output, record input, bibliographic verification and authority work, uncomplicated DLC copy cataloging and other duties as assigned by Coordinator or Director.

Application: Apply w/resume to: David A. Cobb, 418 Library 1408 W. Gregory Drive, University of Illinois, Urbana, IL 61801.
* UNIVERSITY OF WYOMING LIBRARIES ACQUIRES 100,000TH MAP

A public ceremony dedicating the University of Wyoming Libraries' 100,000th map was held on June 13, 1984, in the Documents and Maps Department of Coe Library. The map was added to Coe Library's Map Collection on April 13, 1984, and was purchased from Richard Fitch, a rare books and maps dealer located in Santa Fe, New Mexico.

The 100,000th map, titled Territory of Wyoming, depicts the Territory as it existed in 1876. At this time the Territory consisted of five counties: Laramie, Albany, Carbon, Sweetwater, and Uinta, and the recently created Yellowstone National Park. The map was engraved and printed by Julius Bien for the General Land Office of the U.S. Department of the Interior.

Dr. T. A. Larson, U. W. professor emeritus of history, four-term state legislator, and noted author, was the featured speaker at the ceremony. Dr. Larson commented on the origin of the county system that had its beginnings in England, the development of Wyoming's twenty-three counties, proposed counties that were never approved by the state legislature or its governors, and some of the history of the state that is documented on the map.

Jim Walsh, maps and documents librarian, spoke on the acquisition of the map, Coe Library's Map Collection, and the map's lithographer, Julius Bien. Bien engraved and printed a number of maps for the U.S. Government from the mid-1850's, when he engraved the maps that accompanied the Pacific Railroad Survey, until the end of the century. Some of his works include The Atlas to Accompany the Official Records of the Union and Confederate Armies, The Geological and Geographical Atlas of Colorado, and the atlas that accompanied The Geology of Yellowstone National Park.

Approximately forty-five people attended the dedication, among whom were Donald L. Veal, University of Wyoming President, Keith Cottam, director of the University Libraries, and Joanne Bessler, associate director of public services for the University Libraries.

An exhibit of historical maps from Coe Library's Map Collection, depicting the development of Wyoming's counties, was on display at the ceremony and remained through July.

* MASTERPIECE OF 19TH CENTURY CARTOGRAPHY ACQUIRED AT BYU

The Harold B. Lee Library, Brigham Young University, Provo, Utah, has recently acquired and added to its Special Collections a complete set of the Specialkarte der Österreichisch-unparischen
Monarchie, a monumental collection of 1:75,000 scale topographic maps of the entire Astro-Hungarian Empire. The map, complete in 752 sheets, was compiled and produced by the Militargeographische Institut of Vienna between 1873 and 1889. The 752 sheets are dissected, mounted on linen and are preserved in 47 uniform, octavo-size Royal slip-cases, each one covered with red cloth with red leather spines which are profusely tooled in gold. This set was once the property of Ernest-Augustus, Duke of Cumberland, the last King of Hannover.

The map is a milestone of advanced cartographical technology of the 19th century and is also of inestimable value as a research tool for historical studies and genealogical research. The official name of the mapping project was the Franz-Joseph Survey. The project commenced on 24 April 1869 by order of Emperor Franz Joseph I and was completed in 1887. The most important innovation was the switch in reproduction techniques from copper-plate engraving to heliogravure or photogravure which saved 50% in time and costs. Relief is shown on the maps by contour lines at 100 meter intervals and by very detailed hachuring. The map scale of 1:75,000 allows for tremendous detail: every road, city, town, village and farm, practically every building in the Empire. Considerable attention was paid to the proper spelling of place names and other geographical nomenclature. As political boundaries have changed many of these place names have also changed creating problems for historical and genealogical research. This map preserves he original Austro-Hungarian place names of the 19th century. It remained the authority for all the areas it covered through the Second World War.

by Riley Moffat, from Selected Acquisitions, BYU Map Collection, January-August 1984.

* 500 YEARS OF ATLAS MAKING ON EXHIBIT AT LIBRARY OF CONGRESS

"Images of the World: The Atlas Through History", a major exhibition tracing more than 500 years of atlas making from the late 15th century to the present was held during August, September, and October, 1984, in the Madison Gallery of the Library of Congress.

The exhibition of over 270 atlases and atlas plates illustrated the expansion of geographic and scientific knowledge from the Age of Discoveries during the Renaissance to the rise of the natural and social sciences during the 19th and 20th centuries. Arranged in chronological order from the 15th to the 20th centuries, the works are outstanding examples of atlas development. Several sections of topical atlases including topographic, cadastral and city, historical, and national and regional atlases focus on the highly specialized types and uses of atlases.
Embellished title pages, ornate cartouches, decorative border designs, finely engraved portraits, illuminated colors, architectural renderings, perspective views, and flowing Italic lettering all served to enhance the early atlases.

Among the rare and important items on display is a copper engraving of a map of the world published in 1478, which is based on a manuscript map by the Benedictine monk, Nicolaus Germanus. Another superb example, considered a milestone in the history of atlas printing, is a three-color woodcut of the province of Lorraine from Martin Wadseemuller's 1513 Strassburg edition of Ptolemy's Geography.

Also on display is Volume 12 of the largest atlas ever produced, Joan Blaeu's Le Grand Atlas with gold tooing. The atlases in this exhibit are from the Geography and Map Division's collection of over 48,000 atlases.

Associated with the exhibit, an international symposium entitled "Images of the World: The Atlas Through History" was held at the Library of Congress on October 25-26, 1984. The symposium was sponsored by the Center for the Book and the Geography and Map Division of the Library of Congress.

The program of the symposium contained the following presentations:

Welcome and Opening Remarks: Dr. Daniel J. Boorstin, The Librarian of Congress.

"16th Century Manuscript Maritime Atlases for Special Presentation", by Dr. Helen Wallis, Map Librarian, The British Library

"An Inquiry into Early Chinese Atlases Through the Ming Dynasty", by Professor Mei-Ling Hsu, Department of Geography, University of Minnesota

"Italian Composite Atlases of the 16th Century", by Professor David Woodward, Department of Geography, University of Wisconsin

"Atlas Cartography in the Low Countries in the 16th, 17th, & 18th Centuries", by Professor Dr. Ir. C. Koeman, Emeritus Professor, Rijkssuniversiteit Utrecht

"Lucas Janszoon Wagenaer's Nautical Atlases and Pilot Books", by Professor Dr. Gunter Schilder, Geografisch Instituut, Rijksuniversiteit Utrecht

"French Atlases and Teaching from the 16th to 18th Centuries", by Mme. Mireille Pastoreau, Department des Cartes et Plans, Bibliothèque Nationale, Paris

"The Geographical Atlas in 18th Century English Society", by Dr.
J.B. Harley, Department of Geography, University of Exeter

"German Atlas Development During the 19th Century", by Professor Dr. Wolfgang Scharfe, Fachrichtung Kartographie, Freie Universität Berlin

"Austrian Atlases of the Late 19th & Early 20th Centuries", by Dr. Johannes Dorflinger, Institut fur Geschichte, Universität Wien

"The Late 18th and Early 19th Century Italian Atlases", Professor Vladimiro Valerio, Istituto di Matematica Universita degli Studi di Napoli


"The American County Atlas: Popular Images of the National Settlement Experience, 1861-1984", Prof. Michael P. Conzen, Department of Geography, University of Chicago

"The Rise of the National Atlas", Prof. Mark Monmonier, Department of Geography, Syracuse University

"Twentieth Century Children's Atlases: Social Forces or Educational Farce?", Prof. Henry W. Castner, Department of Geography, Queens University


Chairmen of the four sessions of the symposium were:

Dr. John A. Wolter, Chief, Geography and Map Division, The Library of Congress, Washington, D.C.

Professor Dr. Norman J.W. Thrower, Director, William Andrews Clark Memorial Library, University of California, Los Angeles

Professor Emeritus Arthur H. Robinson, University of Wisconsin, Madison

Dr. Joel L. Morrison, Senior Advisor for Geography, U.S.G.S.

* The Art of Map-Making -- Dutch Cartography from the Middle Ages to the Industrial Revolution

An exhibition, September 24 - October 12, 1984, presented by the Department of Geography and Environmental Studies in cooperation with the C. E. Smith Museum of Anthropology, California State University at Hayward.
Richard Fitch, Old Maps & Prints & Books, 2324 Calle Halcon, Santa Fe, New Mexico 87505 (505) 982-2939

Catalogue No. 41: Americana 1984. 312 items; 129 illus.

Catalogue subscription $5 for three-issues. Sample copies $2 in North America, $5 elsewhere.

"Evaluation of the National Archives Program to Convert Nitrate Aerial Photographs of the United States to a Stable-Base Safety Film; Report to the National Advisory Council on Historic Preservation", by Richard S. Williams, Jr.; Thomas R. Lyons; Jane G. Ferrigno; and Michael C. Quinn.


"The National Archives has conscientiously responded to these recommendations and will have accomplished a difficult and tedious task in a highly professional manner by the end of 1983. Their efforts are worthy of the highest commendation by all involved in the preservation and use of this historical aerial photography." [p. 1440]
ATLAS & BOOK REVIEWS

edited by

Peter L. Stark

Map Librarian
University of Oregon
Eugene, OR 97403

Map of Hillsborough Co., New Hampshire, from actual surveys by J. Chance Jr. Smith, Mason & Co. publishers...Boston...Philadelphia 1858. [repr. Old Maps, West Chesterfield, NH> 1982] 60 sheets, 11x14", Box. $24.95 LC: 82-62797 ISBN 0-911653-02-3. (One hundred copies of this map have been hardbound and priced at $39.00 per copy.)

The large scale county maps of the 19th and early 20th centuries offer a wealth of information to the interested, serious historian. Showing locations of farms and houses, land ownership, detailed maps of towns and frequently illustrated with pictorial vignettes these maps offer to the imaginative user an invaluable window to the past. They also present problems, however, which often hamper if not preclude their usefulness. Availability and access are frequent problems encountered. The large size can also make difficult their use in an office or at home. When available, many of the maps are in such poor condition that one is fearful of even approaching them. Finally, there is scarcity, not printed in large quantities initially, and due to poor storage, many have not survived. As a result they are often prohibitively expensive to most individuals and many libraries. To meet these problems Old Maps, has published a facsimile edition of the Map of Hillsborough Co., New Hampshire 1858.

Originally a 25 square foot single map, the reprint is a series of 60 11x14" sheets including historical introduction and index. The map sheets of the county are reproduced to scale as are the eleven engravings that border the original. The village detail maps are enlarged by 1/2 for clarity. The printing quality is excellent, allowing all textual information on the map to be easily read.

A certain advantage is lost, of course, by not having the whole map to view as a single entity. Nevertheless, given the chance of
doing without or having it in pieces, one would naturally opt for the pieces. Personally, I found the set very easy to use and in fact have given some thought to the practicality of sectioning large older maps to facilitate better storage and easier handling.

It raises serious questions, however, regarding conservation versus protection versus availability versus practicality. Current restoration costs for a 5 foot square map can range from $4-600 or more depending on extent of work to be done. Many libraries and individuals simply don’t have this kind of money to spend. I submit that it may be better to carefully section the maps and encapsulate them well until such time as full restoration can be carried out. The maps will be available and usable and still protected. To do nothing will only allow further deterioration. While it is true, the integrity f the map may be violated, its content will, nevertheless, be preserved and available to users. I would welcome further comment on this subject from other map librarians and curators. I have not implemented it for the University of California-Davis map collection by am considering it pending a more extensive review of the question.

I hope this publishing effort is very successful. There is a real need and, hopefully, a market for the reprinting of early maps, especially the large county maps.

David Lundquist
Map Librarian
University of California
Davis, CA 95616


Marvin Falk, formerly the Arctic Bibliographer and currently Curator of Rare Books and Associate Professor of Library Science at the University of Alaska, Fairbanks, has compiled an extensive listing of pre-1900 maps which supersedes in number of entries all previous bibliographies of Alaskan cartography. Falk has intentionally not set himself the task of compiling the definitive bibliography of early maps of Alaska. His publication is aimed at a general audience of users rather than historians of cartography. In his introduction he states that his purpose is to “provide a guide to the location of map images, not an exhaustive bibliographic description of each map,” and that his “guiding principle is access to at least a copy of the map.” Therefore, he has not attempted to distinguish between variant states of maps and at times he cites commonly available reproductions rather than original maps. In most cases no reference is given to the location of original material. The bibliography is limited to
printed maps, but it does include citations to manuscripts subsequently published in facsimile. Falk has succeeded in his efforts to bring to light the majority of early printed maps and charts of Alaska. Unfortunately, the potential value of this bibliography is diminished by shortcomings in the compiling, editing, and indexing of the work.

Alaskan Maps contains descriptions of approximately 1500 chronologically arranged maps dating from ca. 1300 to 1900, a few map reproductions, a substantial bibliography of sources relating to the mapping of Alaska, and a brief introductory essay entitled "History of Alaskan Cartography." The bibliography's computer generated format is in general satisfactory. It is, however, somewhat disconcerting to find the entry number for a map given as the final line of one page and the accompanying description not appearing until the following page.

In comparison to most other states, Alaska has a good foundation of cartobibliographic resources. In compiling Alaskan Maps Falk has relied heavily on previously published historical and bibliographical material. In particular he has included the citations for Alaskan maps found in H.R. Wagner's Cartography of the Northwest Coast of America (1937); P.L. Phillips' Alaska and the Northwest Part of North America, 1588-1898: Maps in the Library of Congress (1898); and A.V. Efimov's Atlas of Geographic Discoveries in Siberia and North-Western America, XVII-XVIII Centuries (1964), an excellent source for early Russian maps of Alaska. Although many of the maps listed in Falk's work are cited elsewhere, one of the strengths of Alaskan Maps is that it brings together material from a number of diverse sources into one listing. Because of the author's extensive knowledge of Alaskan historical literature and bibliographic sources, the work is particularly strong in identifying maps within texts.

The scope of the work is not limited exclusively to maps of Alaska. Falk has also included descriptions of early maps of the world, North America, North Pacific, and the Arctic which one would assume are included because of their importance in depicting the evolving knowledge and perception of the geography of Alaska. In many cases, however, the author has simply listed these general and regional maps and not sufficiently commented on them to satisfactorily justify their inclusion in a bibliography of Alaskan maps.

The map entries are generally complete, clear, and informative. Except for the omission of scale statements, they contain the standard bibliographic descriptive elements. In addition Falk has provided a great help by transliterating the numerous Cyrillic alphabet entries and translating Russian titles into English. He also gives a reference to another major authority that cites the same map, and if known, a citation to where the map has been reproduced. Because he usually does not give any information about which libraries hold copies of a particular map, the
reference to another authority also citing that map is a valuable aid to locating a copy of the original item. Although Falk includes comments on many of the maps, he does not claim to be providing extensively annotated descriptions. One would wish, however, that he would have included more information about the significance of some of the maps.

Falk's bibliography contains an extensive listing of Alaskan maps, but it cannot be considered comprehensive. The only collections the author acknowledges visiting or contacting outside Alaska are the major map libraries in England and the Nordenskiold Collections in Helsinki. It appears that he did not visit a number of the principal historical map collections in the United States. In particular, the collection that this reviewer is most familiar with, that of the Geography and Map Division of the Library of Congress, contains an important collection of printed maps of Alaska. Falk was able to obtain references to most of the Library of Congress material through Phillips' work, but he missed including descriptions of a number of items that have been added to the Geography and Map Division's collections since the publication of Phillips' bibliography in 1898.

Aside from minor typographical and spelling errors, Falk's work suffers from some serious defects. The major one is that it includes citations to several maps and charts which do not provide coverage of any portion of Alaska. In the process of reviewing only selected citations the following examples of non-Alaskan maps were found. Items 1789-3, 1789-6, 1789-7, 1789-9, 1789-10, 1789-11, 1789-12, and 1789-13 are all plans published by Alexander Dalrymple of ports and harbors on the coast of British Columbia. Item 1855-10 is a chart of the Strait of Seniavine which is located along the Siberian coast of Bering Strait. Item 1865-2 is a British Admiralty chart of the Strait of Juan de Fuca showing portions of Washington and British Columbia. Item 1881-5 is a U.S. Hydrographic Office chart of a portion of Wrangel Island—not either of the Wrangel Islands in southeastern Alaska, but the Wrangel Island in the Soviet Union. The likely explanation for these errors is that the citations were taken from other bibliographic sources without the author actually examining the maps. Yet, even without direct examination, careful editing should have eliminated the inclusion of these non-Alaskan maps. The author's apparent reliance on other bibliographic sources for his citations will also explain why he perpetuates errors found in those earlier sources.

The reference value of the bibliography is also diminished by incomplete indexing. Several examples were noted of personal names and place names found in the bibliographic descriptions being omitted from the index. It appears that only the principal map compilers were usually indexed. Other contributors, such as engravers, were often not indexed. The author should also have included cross references in the index from obsolete or variant spellings of place names to more modern usage.
Although not the definitive listing of pre-1900 printed maps of Alaska, Falk's Alaskan Maps is still a useful contribution to the growing list of state cartobibliographies. It is the most comprehensive bibliography of maps of Alaska currently available. Librarians, however, need to be mindful of the work's shortcomings.

James A. Flatness
Geography and Map Division
Library of Congress
Washington, D.C.

---------------------------------------------

Author's reply to the review of his:

Alaskan Maps: A Cartobibliography of Alaska to 1900.

The parameters for the inclusion of maps in the cartobibliography are explained in the "Introduction" and in the essay "History of Alaskan Cartography" in the front of my book. I am not sure that Mr. Flatness has fully understood the selection criteria or the methodology.

Pre-discovery maps are included on the basis of a five part division of geographic concepts that display a variety of assumptions about the nature of the North Pacific and the Arctic. The number of entries for this era is kept to a minimum and those maps which do not have separate annotations are described in the text of the essay.

As direct observation began to increase the geographic knowledge of Alaska, the focus of the cartobibliography begins to narrow, but still includes some maps which also cover areas outside the borders of present day Alaska if they are relevant to Alaska's historical geography. Thus some of the early Jesuit and Dutch East India mapping of Japan is included because of some of the explicit cartographic assumptions about regions further north and their relationship to the North American continent. Another example would be maps concerning the Nootka controversy that Flatness maintains are included in error.

In addition to the Russians, there were New England and British fur traders and various Spanish expeditions active on the Northwest Coast. All pursued claims, either to the right to trade or to the territory itself. Difficulties between the Spanish who seized British ships in Nootka Sound and the British government almost led to war. In this series of maps, Alexander Dalrymple summarizes all available sources and claims on the British Columbia coast (1789-3, 1789-6, etc.) He includes information
from fur traders and Spanish sources. The resultant Nootka Sound Agreement of 1790 excluded the Spanish and the British/Russian Treaty of 1825 established the present southern border of Alaska. This map (quasi official) series in itself had significant influence with the British government and played a role in the determination of Alaska's boundaries.

Flatness objects to the inclusion of 1881-5, a map of a part of Wrangel Island. This map was included because it formed part of the basis for U.S. claims to the island which then might be administered as part of the Territory of Alaska. The exploration of this area by U.S. naval officers (Putnam and Stoney) was part of the voyage of the Jeanette commanded by Captain De long. It was lost in the ice. The Rogers sent to search for her burned, but the survivors carried out extensive explorations and surveys. The last significant act in the drama of non-Russian claims was the attempted colonization of the uninhabited island through efforts organized by Vilhajalmur Stefansson, outfitted from Nome, 1921-1923. It was an extension of his earlier Canadian Arctic Expedition of 1913-18, and pressed British claims. It failed, and today only a few on the far right still take either U.S. or British claims seriously (John Birch Society, etc.).

I would be most interested in the items that were missed from the L.C. collection. John Wolters and I were able to find relatively few maps not included in Phillips during my visit to the Geography and Map Division during parts of December 1982 and January 1983. Most of the maps that we did find were published in 1899 and 1900, and are part of an uncataloged collection assembled by Phillips after the publication of his cartobibliography. Work at the Newberry Library's historical map collection and at the University of Washington's Pacific Northwest collection also failed to turn up significant numbers of maps not already cited elsewhere. The published catalogs of other major collections, such as the Bancroft Library's Index to Printed Maps, were consulted, of course, and are listed in the bibliography. All in all, the cartobibliography represents five year's labor, including full-time effort during an academic year's sabbatical leave. I am sure that there are numbers of maps that I missed, but the project had to reach a conclusion at some point. I would welcome citations of missed maps from readers of the WAML Information Bulletin so that I can issue a supplementary list in the future.

Marvin W. Falk, Ph.D.
The Elmer E. Rasmuson Library
Curator of Rare Books and
Associate Professor of Library Science
University of Alaska - Fairbanks

The War Atlas: Armed Conflict-Armed Peace is a frightening look into a controversial topic that few Americans know much about. Until recently we have accepted our defense superiority as a must in order to stop the spread of Communist aggression from Eastern-bloc countries. We have generally accepted this philosophy without thought of what it has meant in terms of the Arms Race. The War Atlas is an examination of the past, a look at the present, and hopefully an insight into what could be a devastating future if steps are not taken to improve our global relations.

While the title suggests an atlas dealing with wars past and present, Kidron and Smith have chosen a time frame beginning post World War II and focused primarily on the present. One gets the impression that the authors elected to write this book as much as a form of protest as an objective look into the topic of war. The text accompanying the maps contains as much polemic opinion as fact. Indeed, the text takes a great deal away from the usefulness of the atlas as it immediately presents a biased view to the reader. The information presented in graphic form speaks for itself!

The War Atlas is divided into seven parts beginning with a record of wars fought since 1945. Subsequent sections elaborate on weaponry, global reach, war resources, the market place, destruction caused by warfare, and military breakup. Maps are presented as they relate to each section. Some of the more interesting subtopics within sections include the distribution of military hardware and people, the network of military bases and communication stations, the political division of the world, and the economic, industrial and commercial aspects of the international military order. There is an attempt at the end to illustrate some of the political and ecological effects of war and the last section even includes a map portraying the growing world opposition to war.

Kidron and Smith have included an extensive bibliography. One must recognize, however, that they had access only to "unclassified" information, so there are many gaps in the data. The authors have included "notes" on each map discussing data problems where they occurred. Where decisions were needed when data conflicted, these were explained. Unfortunately, this information also gave the general impression that no map was completely accurate. While Kidron and Smith acknowledge these data shortcomings when they occur, they stress that precise figures are not as important as the general trend of the information. Hence, given this situation, it seems that they have
succeeded in giving the best available look at the subject.

Map symbolism presented many interpretation problems. While many maps provide an instantaneous message, others are very difficult to comprehend. Being a cartographer, I can appreciate the challenge of depicting the type and quantity of information presented on a global scale. However, I do believe that rather than combining many layers of thematic information on one map, it would have been more useful to simplify and include more pages in the atlas. In many instances the mass of information tended to confuse rather than inform this reader. The plethora of symbolism, some easy to comprehend and some not so easy, also created a problem of what belonged where. I did appreciate the authors' use of polar map projections of the Northern Hemisphere when depicting strategic information regarding the superpowers. They were effective in giving a better perspective on distance and also direction. The cross tab at the bottom of each page that provide the map number for related maps in other portions of the atlas, is especially useful.

The War Atlas provides a new graphic awareness of war and the World Arms Race; Michael Kidron and Dan Smith are to be commended for their effort. The completion of this atlas involved a great deal of difficult research and cartographic design work. Given the information it provides, its low price, small size, and paperback format make it a useful tool to any geography or world affairs enthusiast.

Charles W. Nelson
Cartographic Technician/Instructor
Department of Geography
California State University, Chico
Chico, CA 95929

LC 82-42-920.

Kister's purpose "is to help North American consumers find an appropriate atlas for purchase or consultation." In this work he has compiled data on 105 world atlases, using a cut-off date of September 1, 1983. Included are children's atlases and some out-of-print works.

The author is best known for his Encyclopedia Buying Guide, which is now in its third edition (Bowker, 1981) and an established standard reference book. He uses a similar format here to evaluate atlases. While not a map specialist, Kister has considerable expertise as an evaluator of reference books.
This book begins with an excellent 25 page essay "Finding the Best World Atlases." In it he traces the origins of atlases and then deals with the central issue of determining which features serve which purposes. He discusses coverage, scale, projection, accuracy, currency, legibility, arrangement, reputation of publisher, value for price, and comparisons with similar atlases. The writing style is clear, the arrangement sensible, and there are numerous references to major books and articles on the topic.

Next comes "Atlas Profiles," the main part of the book. For each atlas considered there is a "Fact" paragraph which provides full bibliographic information including size, number of pages, number of index entries, and price. This is followed by a longer paragraph or more called "Evaluation." This section draws heavily on reviews from Choice, Library Journal, Booklist, and other professional publications, and references are provided. This is followed by another paragraph titled "For More Information See."

The appendices include several useful features, the most important of which is a handy summary chart with columns for pages, index entries, map pages, publication date, and price. There is an 82-entry "Map and Atlas Bibliography" with annotations. None, regrettably, are WAML publications, but several WAML members are represented, including Larsgaard and Seavey. Most of the major map authorities are cited: Ristow, Bagrow, Skelton, Robinson, Tooley, and Brown, plus most of the major journals, but not this one.

Another appendix lists out-of-print map and atlas dealers, but misses Nebenzahl and Graham Arader. The last appendix is a list of atlas publishers and distributors. There is a subject-title index.

As for the evaluations themselves, I think they are well thought out and fair. Shortcomings, such as those of Maps on File, are noted, and praise is given where it is deserved. We are told which maps are unique to each atlas - a very good thing to know when you are considering 16 Hammond atlases and 11 Rand McNally atlases. How many Hammond atlases do you need before you have all the maps they produce?

With S. Padraig Walsh's General world atlases in print now 13 years old, it would appear that Kister's book is the new standard for atlas evaluation. It is a sad commentary on these inflationary times that this kind of book, which is designed to save librarians money, is itself so costly. It costs more than most of the atlases it evaluates, and atlases have expensive color printing. Small libraries will certainly want to spend their limited funds on the atlases themselves, relying for selection advice on Library Journal and Booklist. Large libraries, and certainly map libraries where advice is often sought by the public on atlas selection, will find Kister's book a handy quick-reference source.
While the writing of this book is very well done, there is a problem with its production. It is printed on thin paper which lacks opacity. The bleed through is quite noticeable. You can almost read both sides of the age without turning it.

Harold M. Otness
Library
Southern Oregon State College
Ashland, OR  97520


The primary question to be asked about a map as relatively expensive as this is -- may I obtain the same information elsewhere at a lower price? Elsewhere, yes, but the time involved will be considerable.

The decision to purchase this map really all depends on whether your library prefers to spend $95.00 (less 25% educational discount) or have your users plow through NTIS and use their various contacts (if any) in such institutions as the American Association of Petroleum Geologists to obtain the data contained in this map. Of course, information on the United States is relatively easy to acquire: the geothermal resources maps of states issued by National Geophysical Data Center, NOAA, the wind atlases by DeHarppporte (Van Nostrand/Reinhold, New York), the solar map issued by ENMAP of Boulder, Colorado, whose latest name I do not know, and the oil and gas maps by everyone. Moving to the world scene, Petroconsultants in Dublin, Ireland, produces a world coal map for about $55.00. The Soviet Union's GUGK issued a world oil map in 1978. I have not seen a world winds map and I thought I had purchased a world geothermal map from Unesco, but it turned out to be a map on natural hazards.

In summary, there seems to be no set of single-sheet world maps covering each energy resource individually. If your library is interested in having a good collection on energy resources of the world, this is a must purchase.

One major problem is hinted at by the statement above concerning ENMAP's solar map of the United States: small firms frequently (albeit unfortunately) go out of business or change names. About
three years ago this happened with the Charles Mardirosian firm, which sold mineral maps of western states. These maps have now become collector's items. Even though Mardirosian's maps are nearly ten years old, they are still not just the best, but very nearly the only maps on this subject. So, if you decide that your library needs this map, it may be advisable to purchase it quickly.

Mary Larsgaard
Map Room
Colorado School of Mines
Golden, Colorado 80401


Reps' Views and Viewmakers of Urban America is a truly monumental work on the history, reproduction techniques, marketing, and research uses of the lithographic view of cities in the United States, and to a lesser extent, Canada. Slightly more than half the book is a comprehensive union catalog of 4,480 U.S. and Canadian views which are to be found in 229 North American libraries, museums and archives. The scholarly thoroughness with which the writer treats the topic (including a 464-item bibliography), its readability, and the volume's beautiful design make the work well worth the price.

The Library of Congress' Panoramic Maps of Cities in the United States and Canada, is not a history, but rather a checklist. It does contain a highly satisfactory introductory summary of the historical evolution of the panoramic map. The work includes a 23-item selective bibliography, and has entries for 1,726 views. The price is quite modest, and is a GPO depository title, which many libraries will have already received. This second edition is larger, by 609 entries, than its 1974 predecessor (published with the title Panoramic Maps of Anglo-American Cities.)
Each work includes reproductions of bird's-eye views. The LC work has 23 black and white views, Reps 13 in color and 90 in black and white. Neither work contains views which appear in the other, except for one of Salt Lake City, which LC includes in its entirety, and Reps, a detail. The LC work includes photographs of master viewmakers Albert Ruger, T.M. Fowler, O.H. Bailey, and H.H. Bailey. It also contains a chart showing the number of views in its collection by year, and singles out those made by Fowler, Ruger, and J.J. Stoner. Reps includes many pictures, tables, charts and maps. Reps gives detailed biographical information for 51 artists, while the LC work gives briefer information for a smaller number of artists.

The Reps work includes nearly all the views listed in the LC catalog (and cites the LC work's catalog numbers), but the LC volume contains some titles not in Reps. These include views which were published after 1925, but which show a community at an earlier time. In comparing entries for two states, unique views for three California and two Maryland cities were found. The LC work also contains some entries for views appearing in atlases (five for Ohio, for example) which are not in Reps, who includes only separately published items. Hebert/Dempsey include a number of non-lithographic views, such as an 1898 manuscript view of Sinking Spring, Pennsylvania, and Reps includes some low oblique views, which are not really panoramic maps. The LC work lists facsimiles as separate entries, while the Reps work normally includes them as additional holdings statements for the original. It would thus appear that the Hebert/Dempsey work contains some 40-50 unique titles, and the Reps about 2,850.

COMPARATIVE NUMBER OF VIEWS FOR W.A.M.L. STATES AND PROVINCES

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<td>Wyoming</td>
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Views and Viewmakers of Urban America provides more bibliographic detail for each entry than does LC. It gives the name of the community, date of publication, title, size (in inches and centimeters), artist, lithographer, publisher, "key/vignettes/misc" (usually the number of entries in a legend or index, and number of marginal vignettes, advertisements, business directories, etc.), code for institutions holding the title, and citations to catalogs and checklists. The LC publication provides name of community, date, LC call number (where available), artist, publisher, lithographer and size (in inches). It also gives publication or source details for facsimiles and photocopies. Both include good indexes of community names, viewmakers, and publishers. The Hebert/Dempsey index includes entries for institutions from which LC obtained photocopies, and to its Fowler Map Collection.

The LC work is somewhat easier to use than Reps. Both works list views alphabetically by community name within each state. Reps includes Canadian provinces within this arrangement; LC lists all maps of Canada as a single group. The LC work, however, is arranged in tabular format and has clear state name headings. The Reps work has data listed in paragraph format, and lacks headings to guide users quickly to the state/province they desire. While the LC work subarranges community views by date of situation, Reps does it by publication date (frequently not the same), and includes a number of views for which publication dates are unknown at the end of the dated sequence. The former style would seem more useful to the general user, while the latter might be better for art or printing historians. This difference is significant only for cities with many entries, such as San Francisco.

Both works are highly recommended for academic, research and larger public libraries. Before discarding the first edition of the LC work, curators are urged to compare it with this new edition. The views reproduced in the two editions are entirely different.

R. Philip Hoehn  
Map Librarian  
General Library  
University of California  
Berkeley, CA  94720

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Map Librarianship Job Openings


Duties: The map librarian is part of the Science/Technology reference staff with primary responsibility being the administration and supervision of a collection of about 150,000 maps, including DMA, NOAA, and USGS depository maps. The map librarian will be responsible for collection development and management, cataloging, and reference assistance in the Map Room. In addition, the map librarian will assist in general reference work in the Science/Technology Division and will be responsible for book selection, collection management and faculty liaison with the departments of geology and geography and the College of Oceanography. In addition to these duties the map librarian will hire, train, and supervise Map Room support staff, serve on university and library committees, attend professional meetings, and may participate in the library's bibliographic instruction program and online information retrieval service. Some evening and weekend work is required.

Qualifications: Masters degree from A.L.A. -accredited library school is required. Experience in working with a map collection and knowledge of AACR2 are also necessary. An academic background in geography, geology, or oceanography is preferred, as is some coursework in map librarianship. Experience with OCLC is helpful but not essential. Important qualifications include a willingness to participate in professional and research activities, verbal and written communications skills, and demonstrated evidence of ability to work independently and in a collegial relationship, as indicated by letters of recommendation and personal interview.

Appointment: Full-time, 12-month, tenure-track position at faculty rank of Instructor.

Salary: $17,040 or higher, depending upon education and/or experience.

Start date: December 1, 1984. Closing date: Resume and names of three references must be postmarked by October 29, 1984.

Apply to: Mariol Peck; Chairman, Search & Screen Committee; Oregon State University Library, Corvallis, OR 97331; 503/754-3411.

[Editor's Note: Although the deadline for application has passed, the following Job Opening is quoted from American Libraries June 1984 "for the record". It is not known if the job is yet open.]

Head, map room, Hatcher Graduate Library. Administers the map room collection; is responsible for cartographic collection development
in the graduate library, a broad range of services including reference, instructional, and consultative to a diverse population of users from the university, local community, and research community; and for the hiring, training, supervision, and evaluation of the map room staff. Qualifications required: accredited MLS, undergraduate courses in geography and cartography, substantial work experience in an academic or research library, demonstrated supervisory and interpersonal skills; working knowledge of 2 or more European languages. Desirable: undergraduate degree in geography or cartography, experience with standard LC/AACR2 cataloging practices and database searching. Salary dependent on directly relevant experience with a minimum of $18,000. Applications received by June 30 [1984] will be given first consideration. Apply to: Library Personnel Office, 404 Hatcher Graduate Library, University of Michigan, Ann Arbor, MI 48109. ....

... a quoteable line from a different job-vacancy ad: "We are looking for individuals who can tolerate ambiguity...."

Please see additional Job Openings listed in this issue's News Notes that are related to the "University of Illinois Receives $120,000 Grant"

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PUBLICATIONS OF RELEVANCE

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Contributions by

LC = Larry Cruse, University of California, San Diego
HF = Herbert Fox, California State University, Fresno
DL = David Lundquist, University of California, Davis
JP = J. B. Post, Free Library of Philadelphia
SS = Stanley Stevens, University of California, Santa Cruz

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SS Copyright 1984 by Vlad Shkurkin. ISBN 0-932732-41-0
"Non-Commercial Reproduction & Dissemination Encouraged". 12 leaves, 8.5 x 11 in. Available from author: 6025 Rose Arbor, San Pablo, California 94806. phone (415) 232-7742.
* Pacific Travellers Supply, 529 State Street, Santa Barbara, California 93101. (tel.) 805/963-4438

**Catalog of Mapping.** October, 1984. [First Edition]

Pacific Travellers Supply, as we have previously noted, is owned and operated by WAML Member Bill Hunt and his wife. [Bill was co-compiler of WAML Occasional Paper No. 3: Union List of Sanborn .... volume 2.]

Prices for all items listed in Catalog of Mapping are in U.S. $$, and libraries receive a 10% discount off the shown prices. The catalog is 80-pages, spiral bound, and is organized by geographic region. Several of the features of this first edition are welcome - as most dealers don't want their customers to know the dates of publication, here Bill Hunt has provided the dates of editions in his stock. He also evaluates and compares the maps he stocks.


Address correspondence to: Jeanne Young, Secretary, Washington Map Society, 710 Lowander Lane, Silver Spring, MD 20901.

**The Society is in its sixth year. Current Officers are:** Janet Green, President; Robert Hansen, Vice President; James A. Flatness, Treasurer; Jeanne Young, Secretary.

Included in this first issue is a message from Janet Green, Minutes of the WMS meeting of Sept. 18, 1984, by Jeanne Young, a calendar of Exhibitions and Meetings for 1984 & 1985 by Ralph Ehrenberg, a list of recent publications by Eric Wolf, notices of upcoming meetings of the WMS, and the first in a planned series of "Map Memoir" (a contribution from a member of the Society on some topic of cartographic interest): "Early Cartography of Virginia's Northern Neck" by Walter W. Ristow.


viii, 99 p. 8.5 x 11 in. Two-color graphic index; i.e., 85 index maps displaying coverage of hydrographic and topographic charts from 1849 to 1964 created by the U.S. Coast Survey and its successor agencies; e.g., Coast & Geodetic Survey.

This new index is a great improvement, as compared to earlier editions issued by the California State Lands Commission. It
is the blue overprint that makes the difference. Users may easily determine the coverage of a particular chart, not only by the blue overprint but also by the sharp printing job done at the California Printing Office.

"This index has been prepared by the staff of the State Lands Commission as an aid to its own staff, libraries and others who have expressed interest in this collection."

The State Lands Commission's holdings have been growing since the staff began acquiring negative film copies from National Ocean Survey in Rockville, Maryland, in 1971. They now have virtually a complete collection of charts. Descriptive Reports were issued to accompany the charts, some as early as 1863. Each index map indicates the Descriptive Reports held by the State Lands Commission and a list is provided on page ninety-seven to indicate those not yet acquired.

All of the charts covered by this index are available through reproduction firms. Instructions on the procedure are given on page four.

A copy of the index may be obtained from Mr. Roy Minnick, State Lands Commission, 1807 13th Street, Sacramento, CA 95814. Tel. (916) 323-7266.


Royal Library, Prins Willem-Alexanderhof 5, 2595 BE The Hague, The Netherlands.

* Vlad Shkurkin, Publisher. (Precise maps of old Western towns.) 6025 Rose Arbor, San Pablo, CA 94806 (415) 232-7742

Los Angeles Maps I: The City, 1888-1900. A compilation of 540 Sanborn Company fire insurance maps of the City of Los Angeles. ISBN 0-932732-37-2. $68. 1888, 1894, & 1900 are the years covered.


Microfilmed at the Library of Congress in 1984 expressly for Vlad Shkurkin, Publisher. 35mm at 18:1 reduction, B & W film. Although industrial quality prints from individual frames may be ordered for $2 each, purchase of the entire reel is a cost effective acquisition. Send for #38-0 list of cities/dates.
* John P. Coll, Books. P.O. Box 5626, Berkeley, CA 94705
  phone (415) 845-8475

SS
Topographic mapping in the United States; out-of-print
topographic maps produced by federal and state agencies,

John Coll has previously issued catalogs of maps for sale,
but this is the first to include topographic and photomaps of
the U.S. Arizona Bureau of Mines, U.S. Army Map Service,
U.S. Army Corps of Engineers, USGS, and U.S. Geographical
Surveys West of the 100th Meridian.

Thirty-one States of the U.S. are included. Of the 263 items
ranging in price from $150. to $6.50, the Wheeler Survey of
1877 of "Parts of Eastern California & Western Nevada" (atlas
sheets 47B & 47D) being the $150.

The format of this catalog is tabular/columnar, and the
notes and title, SE corner coordinates, survey and edition as
well as reprint date if appropriate. The information pro-
vided make this catalog remarkable, and certain of what one
would buy if ordered.

  Barbara Farrell and Aileen Desbarats. Ottawa, Association
  C84-090142-9

SS
This Guide is highly recommended for all libraries. It is
the "short form Larsgaard" - not equivalent to Larsgaard, but
compact and intended as introductory. Many librarians might
find more information exhausting, and this Guide is brief and
to the point. Designed for a different audience, this Guide
should find its place along side Larsgaard's classic text
on the more sophisticated map librarian's reference shelf.

Copies are available from: Association of Canadian Map Li-
braries, c/o National Map Collection, Public Archives of Can-
da, 395 Wellington Street, Ottawa, Ontario, Canada K1A 0N3.

One can find nearly every aspect of "care and feeding" of the
map collection in this Guide, although one might find some
areas treated in too brief a manner. But, it is, after all,
"directed to those who, though they lack any formal back-
ground in map librarianship, unexpectedly find themselves in
charge of a map collection or are confronted with the task of
setting up a map library." The advice provided in most cases
is appropriate for a collection regardless of location, in
spite of the examples being oriented toward Canadian inter-
est. The references provided lead the reader to more infor-
mation if desired, and citations included almost all the im-
portant works in map librarianship. Basically, this Guide
has something for everyone. Citations appear for some items that were heretofore unknown to this reviewer, and the illustrations (for scale, multi-sheet map, multi-sheet topo sets, and form cards for a catalog) offer some useful ideas for introducing the novice to basic concepts. The poorest illustration is Figure 2.6 "Map types" (on page 30). It presents concepts of the type of information and level of detail to be found on different types of maps. However, the plate used to print this illustration is in need of rejuvenation. Users of this Guide would be attracted to this illustration if it were enlarged to full-page.

One weakness of the Guide, the lack of explanation of the relationship and importance of aerial photography to topographical maps, should be corrected for the next edition. Although not all map collections acquire (nor would have a need for comprehensive holdings of even the local area), at least the map librarian should have a basic understanding of and information on how/where to obtain aerial photography.

In Chapter Four (Physical Control of the Map Document), paragraph 4.36 (page 62) "Storage of Other Materials" includes a statement about storing aerial photographs, without reference to why this material might be part of the collection.

Although paragraph 3.20 "Aerial Photographs or Satellite Imagery" (page 49) advises "When ordering, follow the instructions given by the issuing agencies." This section appears under Acquisition/The Selection Process. While the advice given is appropriate, do the authors of the Guide assume that the audience to whom this information is directed (those who... unexpectedly find themselves in charge of a map collection) will have an inherent understanding of the principal source data from which modern maps are compiled?

Another consideration for the Third Edition of this Guide, "If you choose to accept the assignment", is to compile a subject index. The task of searching for a subject (e.g., aerial photos) became very time consuming - and one is not sure that every reference was found.

In spite of these minor improvements that might be considered for another edition, the Guide has so much to be recommended that I urge all libraries to acquire this work.


Page thirty-three notes that "the Geological Survey's map reference library network has been an important extension of the Survey in many communities across the country. At pres-
ent, there are over 500 libraries that house collections of Geological Survey topographic and scientific maps. To pro-
vide access to a greater number of citizens and to eliminate
duplication among depository systems, thereby cutting costs,
several map depository programs (including the Geological
Survey and Defense Mapping Agency programs) are being consol-
diated within the larger Congressional depository system.
The consolidated, but expanded, program will be administered
by the Government Printing Office under the policy direction
of the Joint Committee on Printing. The program will be im-
plemented in early 1984, following a survey by the Government
Printing Office to determine which products each depository
library wishes to receive. The Geological Survey will then
make monthly mailings to the libraries of the Survey and
Defense Mapping Agency maps." [The inter-agency agreement
between USGS and GPO for the distribution of USGS & DMA maps
has been signed and is to be implemented during Fiscal Year
beginning Oct. 1, 1984.]

* United States. General Services Administration.
Worldwide geographic location codes. Washington, D.C.,
21 x 27 cm. pamphlet [1], 397 p. paper $5.25 / magnetic
tape $908. SUDOCs GS 1.2:G29/984

LC
Continues code books published 1969, 1972, 1976 by GSA, 1972,
1974, 1976, by HEW, and 1979 by National Bureau of Standards
under guidance of Federal Information Processing Standards
(FIPS) 5, 6, 10. Includes codes for city, county, state and
or country.

* California. Department of Water Resources.
The California Water Plan: projected use and available
supplies to 2010. Department of Water Resources Bulletin
168-83. Sacramento, 1983. CDWR, P.O. Box 388, Sacramento,
CA 95802. $5.00.

LC
Plate 1 in back pocket: "Surface water projects in Califor-
nia". 108 x 180 cm. ca. 1:1,000,000. Shaded relief map
showing water delivery system. Includes projects by color.
Plate 2: "Irrigated and Urban Lands". 108 x 100 cm.
ca. 1:11,000,000. Insets: Change in irrigated acreage for

* According to the Aug. 27, 1984 issue of U.S. News & World
Report (pp. 57-58), "Residents of hurricane-prone areas may
be interested in a free hurricane-plotting chart, available
from the Blue Hill Observatory in Massachusetts. The chart,
which measures 8 by 24 inches, includes two plotting maps
and information on hurricanes in the Atlantic and Pacific
oceans, as well as the Gulf of Mexico. Send a self-address-
ed, stamped envelope with 40 cents postage to: Hurricane
Chart, P.O. Box 101-WW, East Milton, Mass. 02186."

Outlines the general NASA plan through the end of the century to integrate earth sensors into a package which will supply comprehensive data for global earth science. Data is to be nested in hierarchies, processed for local use, available in self-consistent time series and archivally retained in much higher volumes than at present. As the introduction maintains: "...the Earth Observing System has the potential to revolutionize our understanding of the world around us."

Europe Road Maps - (from the Fresno Bee, 6/10/84)
Going to Europe this summer and planning on renting a car and driving yourself? If you are, Prentice-Hall Publishers has just what you need - larger-than-average-scale road maps of seven of the most popular European countries.

The maps, sponsored by Shell Oil and published by Prentice-Hall, cover France, Germany, Great Britain, Greece, Italy and Spain/Portugal and sell for $4.95 each. In addition to the large scale, they are printed on heavy paper and enclosed in laminated covers. The maps were prepared by Baedeker, a well-known name in travel publishing.

The maps are available in most bookstores which carry travel books, or may be ordered from the publisher, Prentice-Hall, Englewood Cliffs, NJ 07632.


$40. 55 x 46 cm. on Mohawk Superfine paper, acid-free, printed by The Brodock Press, 1984.

Hollinger Corporation, P.O. Box 6185, Arlington, VA 22206.

35th Anniversary Edition of Hollinger's archival products catalog is now available. This 16-page catalog describes all of its standard products that are used in the library, and particularly for map collections and their use of the encapsulation products and acid free map folders.

Publications Manager, Geoscience Information Society, c/o AGI,
4220 King Street, Alexandria, VA 22302.

The GIS Newsletter is the principal serial publication. It is issued 6 times per year ($20 for No. Amer.; $22.50 other).


* Ontario's History in Maps. R. Louis Gentilcore & C. Grant Head

"Sources for Early Maps of Ontario" concludes the text, it is a cartobibliographic essay by Joan Winears, Map Librarian, University of Toronto Library. This volume is a publication of the Ontario Historical Studies Series, University of Toronto Press.

There are 264 maps reproduced in this 304 page atlas, 32 x 42 cm., and each map is accompanied by an explanatory text and a bibliographical reference. Two editions: ISBN 0-8020-3400-4 is the regular edition at $65.00. The collector's edition is ISBN 0-8020-3402-0 at $400.00. This is the Ontario Bicentennial edition, only 150 copies, hand-numbered, quarter bound in Chieftain goatskin stamped in gold on the rounded spine. The boards are covered in Columbia Bradford Linen and the front board carries the crest of the Province in gold foil. A slip case is covered in Bradford Linen and stamped with the crest. Gilt edged on top of the pages, a ribbon marker, end papers with a map, graces this edition. In addition, a four-page insert, tipped on a special guard, shows a map of the first Loyalist settlement in Ontario, printed in Sinetone (dotless) lithography. The book is printed by Herzig Somerville Ltd.

Canadian and US Orders: University of Toronto Press, 5201 Dufferin St., Downsview, Ontario, Canada 53H 5T8.
UK & Europe: University of Toronto Press, c/o International Book Distributors Ltd., 66 Wood Lane End, Hemel Hempstead, Hertfordshire HP2 4RG, England.


This volume was issued jointly by the Fourth Corner Registry of Bellingham and the Center for Northwest Studies. $9.95 43 x 28 cm. 70 p. maps, text, photos.

More than fifty maps reproduced in the volume have been selected from the map collections of the Center for Pacific NW Studies.

Center for Pacific NW Studies, Western Washington University, Bellingham, WA 98225.
* California State University, Fresno. Henry Madden Library. 

15 leaves, 28 cm.

* Topographic mapping of the Americas, Australia, and 
New Zealand, by Mary Lynette Larsgaard. Littleton, CO, 

SS
Mary Larsgaard, author of the now out-of-print classic 
Map Librarianship, an introduction, offers this overview 
of the history and current status of topographic mapping of 
these areas at 1:250,000 or more detailed. Twenty-four na-
tions are treated, including Greenland and each of the usual 
countries associated with the title of this work. An exen-
tive bibliography provides additional sources of information.
$45. US, $54. elsewhere. P.O. Box 263, Littleton, CO 80160

* United States Map Service. P.O. Box 128, Lafayette, CO 80026

This is a general dealer in the usual topo and tourist maps 
one would associate with an all purpose retailer of carto-
graphic material. (303) 665-6833

Cartographia, Hungarian Company for Surveying and Mapping. 
Budapest P.O.B. 132, 1443 Hungary.

SS & LC
A related item to the Karta Mira (world map 1:2,500,000) is 
"Index of Geographical Names - World Map, North America 
1:2 500 000 US $ 14.- " Several new maps are listed: 
"QTH-Radar map of Europe"; "Geoisotherms in the depth of 
1 km, in centigrads in Eastern Europe"; "Watershed area of 
The Danube, 1:5.000.000"

* Using Charts and Graphs: 1000 ideas for visual persuasion.


SS
More than 960 b & w illustrations and the text explain the 
author's advice on the use of pie charts, maps, tables, frames 
and boxes, graphic symbols and their variations.

* 1984 Dallas County Urban Atlas. Dallas, TX, Criterion, 

SS
This atlas presents a comprehensive demographic profile of 
Dallas County by using thematically shaded maps supplement-
ed by descriptive analysis. This is the first in a series 
of atlases that Criterion plans to produce for other major 
metropolitan areas.
$150. Criterion Inc., 13140 Coit Rd, Suite 318, Dallas, TX 75240 (214) 783-1818; or 11100 Roselle, San Diego, CA 92121. (619) 455-0162.

32 color maps plus 40 pages of tables and analysis. The latter compares Dallas County to the rest of Texas & U.S. The data used appears from the publisher's blurb to be 1980 census as well as 1982 data.


Also, in GIS Newsletter No. 90, October 1984, Ms. Manson describes, in "The Washington Bibliography— one state's experience", how she compiled the "comprehensive bibliography of the geology and mineral resources of Washington — underline comprehensive"....


* New Zealand Mapkeepers Circle. Newsletter


Ken Scadden, Cartographic Archivist, New Zealand National Archives, presented the next paper at the Ninth Seminar of Map Keeping (Annual Conference of NZMKC) at Dunedin, 1984: "The government as architect and builder in Nineteenth Century New Zealand (1840 to 1900)".

Mr. Scadden apologized early in his presentation to suggest that some might question the choice of his topic, since it was not on the conference theme. "In fact some of you may question the validity of a paper on architectural plans in a MapKeepers Circle Seminar, as they are not maps." He went on to explain that his purpose was to "do a bit of consciousness raising as regards architectural plans and the role which I see that map librarians can play in preserving this valuable aspect of New Zealand's cultural heritage."

A book review by Phil Barton, Map Librarian, Alexander Turnbull Library, is of The directory of UK map collections.
Compiled by Barbara A. Bond, it is published at Kingston upon Thames, by the Map Curators' Group of British Cartographic Society in 1983. It is 28-pages and is Map Curators' Group Publication No. 1. It covers map collections in England, Scotland, Wales, and Northern Ireland, but not Eire.

ISBN 0-904482-05 7 & ISSN 0265-2315 The directory is available from Mr. A.G. Williams, 39 North Street, Winterton Strickland, Blandford, Dorset DT11 0NJ. Price is one-pound, plus cost of postage. Overseas orders should specify air or surface mail.

* The Globe; Journal of the Australian Map Circle

Number 21, 1984, and subscriptions to forthcoming issues are available from Australian Map Circle, P.O. Box El33, Queen Victoria Terrace, A.C.T. 2600, Australia, at the rate of Aust.$ 12.50 individuals, or Aust.$ 18.50 Institutional. No overseas postal charges. Membership is open to anyone with an interest in maps, and is from Jan. 1 each year, which includes receipt of The Globe and the year's occasional Newsletters.

ISBN 0 9593900 0 6 / ISSN 0311-3930;Newsletter:ISSN 0811-9511

Issue #21 includes the following reports from the 12th Annual Conference of the AMC:

"Maps and Tasmanian exploration" by Angus Love
"Actual and potential political boundaries in the Antarctic Region", by Dr. Victor Prescott
"Diverse approach to vegetation mapping - Tasmania 1:500 000"
"Exploration and mapping of caves", by Albert Goede
"Tourist maps - their value in a map library" by Ross Preston
"Cartographic philately", by H.J. Vojacek

A book review of John Noble's The Mapmakers by Margaret Eva and the 1983 Membership List are also in this issue.

* Kaysing, Bill
  Great hot springs of the West. Santa Barbara, Capra Press, 1984. $9.95

* Wallis, Helen, and Robinson, Arthur H. (eds.)

LC


LC Includes "Code of Responsible Use for OCLC Participating Libraries", and MOUG Bylaws. For a subscription, contact
Linda Cottrell, Editor, MOUG Newsletter, Map Collection, University Library, University of Arizona, Tucson, AZ 85721.

* American Society of Photogrammetry. [add $2 post each item.]

Multilingual Dictionary of remote sensing and photogrammetry, Falls Church, VA, 1984. $30.

- Renewable resources management: applications of remote sensing. 1984. $40.

- Color aerial photography in the plant sciences, ninth biennial workshop. 1984. $25.


- 1918 aerial photographic mosaic of Washington, D.C. 20” x 26”. $10.


- Technical Papers, 50th Annual Meeting, ASP. 1984. $12.50


LC

Available from UNIPUB as E/Conf.72/4/ADD.1. No price given. Includes national reports by Australia, China, Cyprus, Kampuchea, Egypt, Fiji, Federal Republic of Germany, Indonesia, Japan, Kuwait, Macao, Malaysia, Nepal, New Zealand, Philippines, Solomon Islands, Switzerland, Syria, Thailand, USSR, UK and USA. Additional chapters cover technical, applied issues in various countries.


LC & DL


Subscriptions to the "Coyote" are available free from the Photogrammetric Coyote, PO Bx 1119, Mineral Wells, TX 76067.

Earthball. New Games Foundation. P.O. Box 7901, San Francisco CA 94120. $350.00 + $24.50 shipping & handling.

Earthball is a canvas pushball designed to be pushed, kicked or crawled on, vollied like a volley ball over a net, or how about filling your office with it? - it's 6-ft. in diameter. It is a vinyl inside a canvas cover which has an outline of the world's continents silkscreened on the exterior. Each Earthball comes with a set of fabric paints that you can use to permanently paint the colors of the earth on the ball.

Boston's Bikemap; routes, resources, & riding skills.

an overview of metropolitan Boston's bicycling resources.

This map is colored, 37" x 25", and uses USGS topo as base. Great Circle Productions, 43 Upland Rd; Somerville, MA 02144. $2.95 + post & tube $2. Prepay. (617) 776-7072

Interarts, 10 Remington St., Cambridge, MA 02138

Boston Map Guide. $4.95 1984 revised 32-page atlas of central Boston area in 19 pages of large scale maps. The centerfold is detailed Downtown Boston with buildings in 3-D, 1-way streets designated, parking facilities, subway stops and many historic, municipal and tourist points. An airport access map, rapid transit map, Easter Massachusetts key map and complete index of all streets and sites.

Greater Boston/Route 128 Map. $3.95
34" x 44" (folded to 4" x 11"), printed two sides. Indexed.

World Map. 1984 edition. colored, 30" x 53", printed on "Tyvek", a DuPont polyethylene sheet. Cartography by the Swedish firm, Esselle Map Service. $18.95 $2.00 p & tube [Scale not provided on flyer; assume it is phys-pol.]

Add $1.75 for post & handling on Boston items. Prepay.


P.O. Box 245, Berkeley, CA 94701. Contains data on forest climate and characteristics of forest fire potential in California.
NEW MAPPING OF WESTERN NORTH AMERICA

Contributions by:

EP = The Editor, from Publisher's blurbs, or items in hand
HR = Heather Rex, University of New Mexico, Albuquerque
PS = Peter Stark, University of Oregon, Eugene
SS = Stan Stevens, University of California, Santa Cruz
JW = Jim Walsh, University of Wyoming, Laramie

ALASKA


EP

$5.00 from Alaska Division Geology & Geophysics, 794 University Avenue, Fairbanks, Alaska 99701 (907) 474-7062.

ALBERTA

* Atlas of Alberta (no bibliographic information available)

$33.50 + $3.50 p & p. from Atlas of Alberta, 17327 106A Avenue, Edmonton, Alberta, Canada T5S 9Z9

EP

Includes essay by WAML President Ron Whistance-Smith.

UNITED STATES

* [Map showing distribution of microcomputers installed in the top 150 metropolitan areas of the U.S.] Framingham, MA: International Data Corporation, 1983 (1984). no scale. ca. 74 x 59 cm. $150. colored. Includes statistical data (percentages; dollar values). Also available as a biannual computer version.

* National High Altitude Aerial Photography Index Map.

EP

This title will cease as a monthly and commence as a quarterly. Base will be 1:5,000,000. One side will portray color infrared by date, verso, black & white coverage, also by date. For those not on the mailing list already, contact your local NCIC affiliate or EROS Customer Services.

* National Uranium Resource Evaluation Program

EP

Data is retrievable by reference to the 1:250,000-scale National Topographic Map Series quadrangles is now
available through USGS. The program and sources of data are detailed in the NCIC Rocky Mountain Affiliate Network newsletter of October 1, 1984, available from NCIC-R, Rocky Mountain Mapping Center, Box 25046, Mail Stop 504, Denver Federal Center, Denver, CO 80225, tel. (303) 236-5829.


Contains Urban Area maps for each state, tables ranking UA by population, land area, and density; shows the population and area of extended cities; and contains comparisons with 1970 census population counts.

CALIFORNIA


EP

$59.50  31 x 37 cm.

* California Division of Mines & Geology.

Open-file Reports and Maps. The CDMG has established a mailing list for announcements of these items. Contact: CDMG, Division Headquarters, 1416 Ninth St. Room 1341, Sacramento, CA 95814.

* California, Division of Mines & Geology.

Technical map of the geothermal resources of California. Map No. 5. By H. Majmundar. 1:750,000.

EP

$8.50, rolled. Available from CDM&G, P.O. Box 2980, Sacramento, CA 95812.

This map is the second map produced as part of a statewide CDMG inventory and evaluation of California's geothermal resources. The first map, No. 4, Geothermal Resources of California, depicts in a single source, occurrences of California's geothermal resources. No. 5 focuses on developing the relationship of volcanics and tectonics to the occurrence of geothermal resources. It provides a chemical characterization of already-identified occurrences of low and moderate-temperature subsurface water.
* California. Department of Transportation.  
1984 California State Highway Map.  
CalTrans Publications Distribution Unit, 6002 Folsom,  
Sacramento, CA 95819. Free.  
102 x 62 cm. 1:1,320,000. Shaded relief highway map.  
Verso: "Legislative routes"; distance chart, insets.

* California. Division of Oil and Gas.  

EP  
Map No. G1-1 Casa Diablo 1:20,000 Mono County:  
T3S R28E, Sec. 32 & 35  
Map No. G1-2 Lake City 1:20,000 Modoc County:  
T44N R15E, Sec. 23 & 24.  
Map No. G1-3 Susanville 1:7,200 Lassen County:  
T29 & 30N, R12E, Sec. 3,4,5,6,28,29,30,31,32,33,34.  
Map No. G2-1 Salton Sea (North) 1:20,000 Imperial Co.  
Map No. G2-2 Salton Sea (South) 1:20,000 Imperial Co.  
Map No. G2-3 Brawley 1:20,000 Imperial County  
Map No. G2-4 Heber 1:20,000 Imperial County  
Map No. G2-5 East Mesa 1:20,000 Imperial County  
Map No. G2-6 Mesquite 1:20,000 Imperial County  
Map No. G3-1 The Geysers 1:20,000 Lake/Sonoma Cos.  
Map No. G3-2 Calistoga 1:12,500 Napa/Sonoma Counties  
Map No. GW-1 The Geysers Area 1:62,500 parts 4 cos.  
Map No. WI-8 Imperial County 1:125,000 entire county

$3.00 ea. from Cal. Div. Oil & Gas: 1416 Ninth St., Room 1310, Sacramento 95814. (916) 323-1788

* Mt. Tamalpais History Project. Newsletter.

The Summer 1984 issue, #2, features an article (in two parts) by Fred Sandrock (Tamalpais Trail Map Historian), entitled: "The Trails Make the Maps". Seven maps (or parts thereof) are included in this 10-page Newsletter.

SS  
The Newsletter also refers to a new map, "A rambler's guide to the trails of Mt. Tamalpais and the Marin Headlands", sold by the Project ["three thousand copies sold since June 1, 1984!"]. The map was created by "Ben Schmidt and Lincoln Fairley assisted our cartographer, Jerry Olmsted...".

The map is available on two grades of paper, one "on heavier stock for use as a poster." The size and price are not described, but it has been praised "for its three-dimensional qualities, shaded relief, six colors, contours, and the over one hundred historical vignettes taken from [the] Project's file."

Contact: The Mt. Tamalpais History Project, c/o: Fred Sandrock, Executive Secretary and Newsletter, 21 South Green, Larkspur, CA 94939 (phone 415/924-6892).
United States Bureau of Land Management
California visitor map. [Statewide recreation map
covering federal and state camping facilities in Cali-
ifornia.] n.d.

Bureau of Land Management, California State Office,

United States Bureau of Land Management.
California Desert District. Motorized Vehicle Interim
Access Guides.

These maps are free of charge and have been prepared as
an interim access guide until specific routes of travel
can be identified. This is expected to take about two
years. At that time these maps will be obsolete and re-
placed. Map No. 1. Eureka & Saline #2. Panamint
#3 Amargosa #4 Argus #5 Kelso #6 Dumont & Clark Mtn.
#7 Red Mtn. #8 Irwin #9 New York Mtn. #10 El Mirage
#11 Rodman Mtn. #12 Providence Mtn. #13 Sacramento Mtn
#14 Yucca Valley #15 Sheephole Mtn. #16 Turtle Mtn.
#17 Coachella #18 Chuckwalla & McCoy Mtns. #19 Cahuilla
#20 Imperial Valley South #21 Midway Well.

Available from BLM, same Sacramento address as above.

NEW MEXICO

National Geophysical Data Center.

Geothermal Resources of New Mexico: Scientific Map Series

#1 Bouger Gravity Anomaly Map of New Mexico
#2 Composite Residual Total Intensity Aeromagnetic Map of
New Mexico
#3 Hydrology and Geochemistry
#4 Late Tertiary and Quaternary Tectonics and Volcanism

Format: Paper $8 ea. folded, $10 ea. rolled on #4 only.
Clear Plastic: $20 ea. rolled #1,#2,#3 only.
Complete set (paper base & plastic overlays #2,#3,#4) $50
Digital data used to compile aeromagnetic map available on
magnetic tape for $110.
[#1,#2,etc. used here for identification only.]

How to order: U.S. Dept. of Commerce regulations now require
prepayment on all non-federal orders. Telephone pre-orders
are accepted, but data not shipped until payment received.
Make checks payable to COMMERCE/NOAA/MGDC. Add handling fee
for non-USA orders as follows: $5 for orders up to $50; 10% of
cost of total order for orders $50 and over. Pay in US$ on USA bank. Orders may be charged to an American Express,
MasterCard, or Visa card, by telephone or letter; please include card #, exp. date, tele. #, & signature. Inquiries orders, and payment should be addressed to: National Geophysical Data Center, NOAA, Code E/GC1 325 Broadway, Boulder CO 80303. Telephone (303) 497-6125. Prices given here are valid through Sept. 30, 1984. After then call (303) 497-6541 for update.

* Bingham, Edgar
  Physiographic diagram of New Mexico. Emory and Henry College, 1982.

HR
  $2.50 Iron Mountain Press, Box D, Emory, Virginia 24327. 61 x 91 cm. 1:1,000,000.

* Raines, Gary L.

HR
  USGS map MF-1183-Q. 1:250,000 60 x 97 cm. $1.40

* United States Geological Survey
  1:100,000 topographic ser. Sheets: Santa Fe; Villanueva. 1983. 61 x 111 cm. $3.60 ea. or depository.

OREGON

* Ferns, M.L., Brooks, H.C., Wheeler, G.R.
  Geology and gold deposits map of the Northwest Quarter of the Bates quadrangle, Grant County, OR. Portland, Oregon, Oregon Dept. of Geology & Mineral Industries, 1984.

PS
  70 x 102 cm. 1:24,000 $5.00 Geologic Map Series (GMS): 31. ODGMI, 1069 State Office Bldg, Portland, OR 97201


PS
  Bound atlas $150.00; unbound atlas pages $90.00.


Both available from: Paul Benoit, Director
These two large-format atlases represent nearly 10 years of data gathering and analysis conducted by the Columbia River Estuary Data Development Program or CREDDP. The primary purposes of CREDDP were to increase the understanding of the ecology of the Columbia River Estuary and to provide information useful in making land and water use decisions.

The Atlas of Physical and Biological Characteristics contains seven chapters: Physical Characteristics (circulation, sediments and salinity), The Estuary (present-day use, setting), Primary Producers (phytoplankton, benthos, marshes and swamps), Invertebrate Resources, Fish, Birds and Mammals and a summary chapter on habitat types. The maps are colorful and well-executed by Northwest Cartography of Seattle. The maps cover the entire estuary, from the mouth of the Columbia River inland to Puget Island or 46-degrees 10-minutes North x 123-degrees 20-minutes West. The most common scale used in the atlas is 1:250,000 but there are several maps using 1:100,000 and 1:50,000 scales. Explanatory texts include charts and maps and are well connected with the atlas plates.

The companion Bathymetric Atlas uses data gathered from three surveys, 1935, 1958 and 1979-82. To plot the changes in the river's underwater topography, additional survey data from 1868 was included to show, on three maps, accretion and erosion areas between 1865 and 1935, 1935 and 1958, and 1959 to 1982.

The Columbia River Estuary Data Development Program completed its work as of June 30, 1984. These two atlases well represent nearly 10 years of cooperation and hard work of local government, citizenry and program workers.

**Utah**

* Utah Travel Council.  
  Multi-Purpose Maps. A set of eight maps, 1:250,000.  
  63 x 91 cm. folded to 22 x 10 cm. Indexed, with text.  
  Salt Lake City, Utah Travel Council, 1984?

PS  

This is the first in a series of eight maps developed by the Utah Travel Council, Department of Development Services and sponsored by the Four Corners Regional Commission.

Utah's history is one of agricultural and recreational land use planning. In 1847, when the Mormons first settled in Utah, specific lands were carefully selected and developed exclusively for agricultural use. As the population of the nation grew and the "wide-open spaces" di-
appeared, national and state leaders recognized the need to preserve and protect the remaining lands for future generations.

Today, through the continuing efforts of federal, state and local agencies, Utah's visitors can enjoy a wide range of recreational activities.

This set of maps is a product of this cooperative effort and is the most comprehensive multipurpose map published with points of interest and activities available to not only the vacationing motorist but also the outdoorsman.

For the motorist and outdoorsman there are many vacation and recreation sites with clearly marked museums, visitor centers, picnic, camping and rest sites, hiking and snowmobile trails, fishing and hunting grounds, river running and boating facilities.

All major attractions on this map have been assigned letter and numeral coordinate numbers. To locate any attraction refer to the coordinate numbers.

Cartography is by AAA Engineering and Drafting, Inc.

Utah Travel Council, Council Hall/Capitol Hill, Salt Lake City, UT 84114 ATTN: Denise Crump 801/533-5681

WYOMING

* De Bruin, Rodney H. (compiler)
  1:1,000,000  56 x 66 cm.  $2.00  Map Series MS 9G.
  GSW, University Station, Box 3008, Laramie, WY 82071.

* De Bruin, Rodney H. (compiler)
  1:1,000,000  56 x 66 cm.  $2.00  Map Series MS 9H.
  GSW, University Station, Box 3008, Laramie, WY 82071.

* Wyoming Game and Fish Department
  A fisherman's and river runner's map/guide to the upper North Platte River in Wyoming and Colorado.
  Lakewood, CO: Dick Prouty Associates.
  ca. 1:63,360.  37 x 95 cm.  $4.95  Dick Prouty Associates, 1780 Glen Dale Drive, Lakewood, CO 80215.

EP

$2.00 by mail, free over the counter. 1:500,000.
WGS, P.O. Box 3008, Laramie, Wyoming 82071.

Letter to the Editor:

Department of Library Services
British Museum (Natural History)
Cromwell Road, London SW7 5BD

The Editor, WAML Information Bulletin 31 October 1984
Stanley D. Stevens, Map Librarian
c/o University Library
University of California
Santa Cruz, CA 95064
U.S.A.

Dear Mr Stevens

Considering the credentials of the author, listed at the end of the article 'Map collection development planning' in WAML Information Bulletin vol. 15 no. 3 (June 1984), I am very surprised that he has committed an elementary blunder concerning map scales. The statement on p.273 "... a representative fraction ... [of] 1:24 000 ... means ... that the area depicted has been reduced 24 000 times in putting it into the map format. A 1:24 000 map is one twenty four thousandth the size of the ground area it depicts ..." is completely wrong. What has been reduced 24 000 times is the linear distance between two points. The ground area depicted has therefore been reduced (24 000)2 times, i.e. 576 000 000 times.

Yours sincerely

/s/ Angus Johnson

J A A JOHNSON
Map Librarian