

information Bulletin



WESTERN ASSOCIATION OF MAP LIBRARIES

“. . . to encourage high standards in every phase of organization
and administration of map libraries . . .”

Western Association of Map Libraries

Newsletter

Volume 1, Number 2

March 1970

THE ESTABLISHMENT OF THE WAML NEWSLETTER

Last fall, the first issue of the WAML Newsletter was published as an experimental venture. Among the reasons for its publication were: 1. the decision of the membership to conduct its business by mail and informal meetings, 2. the fact that a majority of the members would not be able to attend any one of the semi-annual meetings yet needed to be informed of the activities and accomplishments of the Association, and 3. the need for a means to publish short articles or newsbriefs of interest to those who work in the map libraries of western Canada and the western United States.

The response to the first Newsletter was very encouraging. Many members commented on its usefulness; the Executive Committee approved it unanimously.

The Newsletter will, therefore, become an official publication of the Western Association of Map Libraries. It will be edited by the president. Any member or friend of the Association who wishes to publish short articles or news items of interest to the general membership is encouraged to do so. Newsletter items should be addressed to the president. Until July 1, 1970, all script should be sent to:

Robert Sivers
Map Room
Sciences-Engineering Library
University of California
Santa Barbara, California 93106

All items contributed by members other than the president will appear with the appropriate by-line. As is standard practice with other publications, the editor reserves the right to accept or edit contributions. Contributors will be notified of acceptance or rejection, and publication of an article with any substantive changes by the editor will be done so only with the approval of the writer.

The Newsletter will be published at least three times during the year a given president holds office: approximately one month before each semi-annual meeting, and for the third time as the president's term ends. It will also be published at any other time specifically requested by a majority of the Executive Committee. Volume numbering will change as each president takes office.

PROGRAM FORMAT AND PROGRAM ANNOUNCEMENTS

At the fall meeting, president-elect Mary Schell, distributed evaluation forms on the new format for WAML programs. As members will recall, the new format requires at least one topic of interest to those associated with map collections in public libraries. Four topics are chosen with preference given to a guest speaker for one topic. Excluding the talk given by the guest speaker, each topic is treated by a panel planned by a coordinator. Each panel is limited to a 45 minute presentation; 15 minutes are allowed for questions. The business meeting is limited to the formality of reading proposals submitted for ballot and the reporting of decisions by the Executive Committee.

Of the evaluation forms returned, all were enthusiastic about the new format. Several members chose to comment verbally. Two members, while approving generally of the change, felt that the limitation of 45 minutes for each panel did not permit enough time to treat some topics as thoroughly as they should be. There are two means by which this objection can be met: 1. the president-elect and panel coordinator can define the subject so that 45 minutes is adequate to treat the topic, or 2. arrangements can be made to use two or more panels to treat the subject, if there is sufficient interest within the Association.

Given the response to the new format, Mary Schell and I recommend its adoption, until the membership requests that it be changed.

The program for the spring meeting which you will find in a separate section will be held at the University of California, Santa Cruz, on Saturday, April 25th. Our treasurer, Stan Stevens, will be host. The date chosen complies with the members' decision to hold meetings on Saturdays (of which more is said in a section later on in the Newsletter). The regular program will be supplemented by a special pre-meeting tour at the United States Geological Survey, Menlo Park on Friday, April 24th. Eleanor Wilkins and William Sanders will be co-hosts. All members are urged to attend the pre-meeting tour. Here will be our opportunity to talk with those who produce what is undoubtedly among the most important series of maps in our collections and to find out how topographic maps are compiled, drawn, and printed. For those who collect geological maps, learning about the collection at Menlo Park will be important, since this branch of USGS is responsible for a definitive collection of geologic mapping of western North America. Maps are available on interlibrary loan to qualified borrowers.

Members who plan to attend the tour or meeting should fill out and mail the attendance forms no later than the 7th of April. This will allow our hosts adequate time to plan for the tour and meeting.

NOMINATIONS COMPLETED FOR NEW OFFICERS

Under the revised constitution (a copy of which is included in this mailing), the president-elect (1969/70) automatically succeeds to the presidency on July 1, 1970. The current president will, on the same date, become immediate past president. Both will serve on the Executive Committee. All other officers must be elected for the term July 1, 1970 - June 30, 1971.

The Nomination Committee, composed of Edward Jestes, Mimi Sayer, and Stan Stevens (Chairman), reports the following members who accepted the committee's nomination for the offices listed below:

President-elect	Albert Colombo, Assistant Professor of Geography, San Diego State College
	Edward Thatcher, Map Librarian, University of Oregon
Secretary	Ruthanne Lowe, Library Assistant, University of California, Los Angeles Map Library
	Mrs. Karen Scannell, Principal Librarian, History Department, San Francisco Public Library
Treasurer	Stanley Stevens, Map Librarian, University of California, Santa Cruz

Ballots will be mailed after the spring meeting. The results of the voting will be reported in a subsequent Newsletter.

APPOINTMENT OF CHAIRMAN FOR COMMITTEE ON MINIMUM STANDARDS FOR MAP LIBRARIES

Members of the Executive Committee balloted on the chairman for the newly established Committee on Minimum Standards for Map Libraries. Carlos Hagen, Head, UCLA Map Library, was chosen. Carlos and his committee will be reporting some preliminary findings to the membership within the next year.

WAML ARCHIVES ESTABLISHED AT UNIVERSITY OF CALIFORNIA, BERKELEY

No objection was received from members regarding the proposed establishment of WAML archives at UCB. The Executive Committee passed the proposal unanimously and appointed Sheila Dowd, Librarian in charge, Map Room, University of California, Berkeley, California 94720, as WAML Archivist.

Members or other interested individuals can write Miss Dowd concerning reproductions of past bibliographies or articles prepared for WAML or for information on past activities of the Association. The archives will also contain publications of other map library associations received as gifts or purchased for WAML.

DECEMBER 1969 BALLOT RESULTS

Three ballot proposals were mailed for voting to the forty-nine members of WAML. Listed below are the proposals, results, and some comments.

Ballot Proposal 1. The Executive Committee shall establish a Committee on Acquisition Sources. The charge to the committee shall be to compile a list of addresses of important map producers and dealers throughout the world and to produce an area-subject index to the maps distributed and dealers listed.

Results: Of the forty-nine eligible voters, thirty cast ballots. Twenty-nine voted in favor of the proposal; one voted against. The proposal passed.

Comment: Just days after the ballot results were given to the president, he received a current issue of the Newsletter published by the Association of Canadian Map Libraries. There he learned that a project similar to that adopted by WAML has been under way for some time. ACML so far has collected over 1,500 addresses. The Association plans to publish such a list soon. On recommendation of the president, the Executive Committee has voted to delay implementation of the committee established by the voting on ballot proposal 1 until members have been able to examine the forthcoming publication of ACML. In the meantime, the Executive Committee wishes to thank the following members who volunteered to serve on the committee: E.H. Bryan, Jr., Anna Chiong, Anne Christopher, Sheila Dowd, Barry Gardner-Smith, and Wallace St. Clair.

Ballot Proposal 2. The Executive Committee shall establish a Committee to Investigate Sources of Foreign Mapping. The charge to the committee shall be to investigate possible means of obtaining published foreign topographic and subject mapping not presently available to non-AMS depository map libraries or to map libraries in general; and to report the results of the investigation to the Executive Committee.

Results: Of forty-nine eligible voters, twenty-nine cast ballots. Twenty-five votes were cast in favor of the proposal; four were cast against the proposal. The proposal passed.

Comment: The following members volunteered for the committee: E.H. Bryan, Jr., Albert Colombo, Barry Gardner-Smith, Carlos Hagen, Mary Larsgaard, Stan Stevens, and Ed Thatcher.

The Executive Committee will appoint a chairman or co-chairmen before July 1, 1970.

Ballot Proposal 3. The Executive Committee shall be directed to hold all general meetings of the Western Association of Map Libraries on Saturdays so that members will not have to take time off from their place of employment.

Results: Of forty-nine eligible voters, twenty-five cast ballots. Thirteen voted in favor of the proposal; twelve voted against the proposal. The proposal passed.

Comment: Several members of the Executive Committee have suggested that the margin of one by which the proposal passed indicated that a compromise proposal should be placed before the membership for voting. Accordingly, a proposal will be submitted on a later ballot to alternate meetings between Fridays and Saturdays.

MISCELLANEOUS NEWSNOTES

Map Folder Papers

Several members of WAML have been investigating 1. the desirability of map folders, 2. best papers to use, and 3. some sources of supply.

1. Desirability of Map Folders

Most of us who work in map libraries will agree that map folders are very much needed if collections are actively used. Folders protect maps from damage when other maps are withdrawn from the drawer. They are useful for organizing maps by area and subject for more efficient retrieval. A serious disadvantage of folders for those who have severely limited space for their collection is that their added bulk reduces the number of maps which can be filed per drawer. Furthermore, the necessary labeling of folders presents a significant demand on the labor available in an understaffed library. If the option is chosen to cut folders in order to save on the high cost of pre-cut folders, the availability of additional labor for cutting, folding, and stacking the folders must be taken into account, in

addition to purchasing and maintaining a large cutter and roll holder.

2. Map Folder Papers to Use

Inexpensive Kraft paper folders such as those which are included with newly purchased Hamilton map cases are in general to be avoided, except for temporary storage. The paper wrinkles easily and soon becomes unsightly and torn, even under moderate usage. Folders are difficult to withdraw because the "tooth" of the Kraft paper causes the folders to "stick" against one another.

In purchasing stock that is dense and smooth, a further consideration is the neutrality or lack of acidity of the paper. Non-acid paper will, other factors being equal, last longer than acid stock. Since the investment in preparing and labeling folders is considerable, the durability of folder stock must be considered. Although no data is available to this writer on the effect of storing map sheets between acidic folders, it is worth noting that J. Douglas Hill of the Library of Congress quotes W.J. Barrow, a well known expert on the preservation of library materials, as saying:

"Some years ago ... a folder of pH 5.8, would have been considered an acceptable folder, but today it is not ... it is not acid free."

3. Sources of Supply

The Library of Congress currently uses pre-cut folders manufactured of Permalife paper by the Hollinger Corporation. The paper is basic with a pH of 8.5. The folders are relatively expensive. A quote for the size of map folders needed by your map library can be obtained by writing:

The Hollinger Corporation
3810 S. Four Mile Run Drive
Arlington, Virginia 22206

For those who may wish to cut their own folders, a quote on .010 Syncropresspak with a pH of 6.5-7.5 can be obtained from:

Riegel Paper Corporation
Paper Division
260 Madison Avenue
New York, New York 10016

A source for a special map folder cutter is:

Zeus Rollcut Company
P.O. Box 296
San Rafael, California

Those who wish to have a successful design for a roll-holder can write:

Carlos Hagen
 Head, UCLA Map Library
 University of California
 Los Angeles, California 90024

All members will be interested in the folder stock used in other libraries, and any problems or advantages discovered in using it. Please address any information to the current president of WAML.

New Book of Interest to Map Libraries

A book of general interest to all map libraries has been published recently. Modern Maps and Atlases; An Outline Guide to Twentieth Century Production was written by C.B. Muriel Lock and published by Archon Books and Clive Bingly in 1969. The author covers the primary producers of topographic and thematic maps as well as national and subject atlases. In addition, Dr. Lock includes short chapters on modern cartography and map librarianship. Carlos Hagen will review the book in a subsequent issue of the Newsletter.

MINUTES, RESUMES AND BIBLIOGRAPHIES FROM THE FALL MEETING, 1969, WESTERN ASSOCIATION OF MAP LIBRARIES

Minutes

The Western Association of Map Libraries met at the University of California, Davis, on Friday, October 24, 1969. Those in attendance were:

Mary Ellen Bailey	California State Library
Karyle Butcher	Los Angeles Public Library
David Cowan	California State Lands Commission
Ida Dobber	University of California, Davis
Sheila Dowd	University of California, Berkeley
Ruth Elwonger	California State Library
John Fetros	San Francisco State Library
Barry Gardner-Smith	Scripps Institution of Oceanography
Carlos Hagen	University of California, Los Angeles
Phil Hoehm	Bancroft Library, Berkeley
Edward Jestes	University of California, Davis
Katherine Karpenstein	University of California, Davis
Vera Loomis	University of California, Davis
Ruthanne Lowe	University of California, Los Angeles
Beatrice Lukens	University of California, Berkeley
Evelyn Percival	University of California, Los Angeles

William Sanders	U.S. Geological Survey, Menlo Park
Sandra Satterlee	Stanford University
Karen Scannell	San Francisco Public Library
Mary Schell	California State Library
Robert Sivers	University of California, Santa Barbara
Stan Stevens	University of California, Santa Cruz
Elizabeth Storey	San Francisco Public Library
Edward Thatcher	University of Oregon, Salem

The meeting was called to order at 9:30 a.m. by President Robert Sivers. It was noted that there were some bibliographies compiled by Richard W. Stephenson from the Library of Congress along with other material available for those who were interested. Bob mentioned that he was trying a new format consisting of three panels and one guest speaker and that he would appreciate comments and suggestions.

The morning panel on Geological Maps was coordinated by Ed Jestes and included Beatrice Lukens and William Sanders. Eleanor Wilkins was unable to attend. Ed Jestes' topic "Geological Maps and Their Use" included a discussion of the various types of geological maps and how to read them, along with mention of the part played by librarians and geologists in using them. This was followed by Beatrice Lukens' explanation of the problems she encountered when she was given the responsibility of organizing and arranging the maps at the Earth Science Library at Berkeley. Especially time consuming, according to her, was the effort made to bring together maps which had been removed from journals and other publications. Finally, William Sanders concluded with a discussion of the classification scheme of the U.S. Geological Library at Menlo Park. He also noted several related magazine articles which he thought might interest the group. A question and answer period followed and we then adjourned for our morning break.

After our break, we heard our guest speaker, Professor David Lee, tell of the use of maps in advertising and propaganda. He presented a very interesting and enlightening talk with reference to maps which had been deliberately falsified, as in the case of maps issued by the Arab and Israeli governments, and maps which had merely been exaggerated for advertising purposes. He cheered everyone present by showing how maps are often used as a symbol for status.

Having adjourned for luncheon, we returned to hear a panel discussion of Nautical Charts, coordinated by Carlos Hagen. Carlos gave the first talk, entitled "Nautical Charts in the Map Library". He discussed the different charts and indexes presently used by the United States and foreign oceanographic offices and passed around samples. He singled out, as being especially helpful, the use of Nautical Charts for locating city plans.

"Oceanographic Surveys of the Scripps Institution of Oceanography" was the topic of Barry Gardner-Smith. Barry had illustrations of some of the ships used by Scripps for the survey, and provided reports issued by those who conducted them.

Ruthanne Lowe concluded with a description of the development of Nautical Charts since the eighteenth century. She had several interesting examples of early charts which are available at the UCLA Map Library.

After the question and answer period, and a coffee break, we proceeded with the final panel composed of Ruth Elwonger and John Fetros who discussed the acquisition of free and inexpensive maps. Ruth emphasized the variety and usefulness of maps which are issued through California state agencies. John, who acted as coordinator because of the illness of Gertrude Cordts, reiterated the need of small and medium-sized public libraries to know the best methods of acquiring maps cheaply. He listed several sources which he thought were particularly valuable.

Bibliographies were distributed by most of the panel members.

The business meeting that followed was very short and consisted essentially of the Secretary reading aloud submitted ballot proposals.

The meeting adjourned at 5:45 p.m.

Respectfully submitted,

Karyle Butcher, Secretary
Western Association of Map Libraries.

Resumes and Bibliographies

Panel 1: Geological Maps

Resume of: "Geological Maps and Their Uses" by Edward C. Jestes,
Map Librarian, University of California, Davis

The various types of geological maps are used primarily as tools for the economic exploitation of Earth's limited natural resources: fuel, metals, building materials, ground water. Academically, they are used to reconstruct the history of Earth and the slow development of life which is now in danger of being rather quickly snuffed out by the over-exploitation of Earth's materials due to over-population.

Geological Maps per se: Display the distribution of rock types, faults, veins, and fossil localities. From the disposition of the rocks at the surface, a geologist can fairly accurately predict the distribution of rocks several thousands of feet below the surface.

Gravity maps: The gravitational force of Earth varies over the surface because of: 1. latitude, 2. elevation (distance from Earth's center of mass), and 3. the mass of the surrounding rocks. When a geophysicist measures gravity, he makes corrections for all three factors so he can compare it with gravity at other localities. In the corrections, the major assumption is the mass of rocks immediately below the locality. After making the corrections on the measured force of gravity, he compares his observed and corrected force with the theoretical force of gravity for that latitude. More often than not, there is a slight discrepancy or anomaly that is not explained by observational or computational error. This anomaly may be higher or lower than the theoretical value and is best explained by assuming an excess or deficit of mass below the station where the observation was made. In other words, a mass of rocks of higher or lower density than those seen at the surface. From this it can be concluded that perhaps a trap for petroleum or other economic deposit may warrant further exploration by drilling or tunneling to the deposit "seen" by the anomalous gravity measurement.

Aeromagnetic maps: Similar to the variations of gravity over Earth's surface, there are local departures from the normal magnetic field of Earth. These are caused by the magnetic properties of minerals in the rocks. Departures can be interpreted as caused by rocks at and below the surface and hence can lead to exploitation. Magnetic anomaly maps are another tool to "see" below the surface or delimit areas for ground observations in remote, relatively pure places of Earth.

Tectonic maps: Similar to geological maps but stress the major structural features produced by uplift, downwarp, or faulting of Earth's crust. They show the structure of Earth's crust as a result of deformation. Tectonic maps may show the ages of mountain building episodes.

Geomorphic maps: Very few of these are produced in the U.S. They display a genethronological classification of land forms which makes it possible to separate active from inactive forms (a simple example would be landslides or sand dunes). In a way, they add a time dimension to land use maps. Most useful to planners and economists. In California, these maps may be called "geological hazards" maps and usually stress areas prone to landslides or areas near active faults.

Resume of: "Bibliographic Control, Patron Access, and Selection of Maps in the U.S. Geological Survey Library, Menlo Park, California" by William Sanders, Librarian, U.S. Geological Survey Library, Menlo Park.

Several years ago, Miss Eleanor Wilkins, Librarian of the U.S. Geological Survey Library in Menlo Park, devised a system of notation and cataloging of maps which made it possible to blend the map collection with the book collection. The classification scheme utilizes the geographic subdivisions of the book collection; for example, 200 in parentheses stands for the U.S. as a whole. Therefore, a geologic map of the U.S. would be classed in M(200)2 - the "M" stands for maps; the "2" is an abbreviated form of 200 (not in parentheses) for geology. Cuttering is done in the usual way.

LC form is used for entries and subject headings. Boggs and Lewis* is our cataloging guide. The map cataloging work sheet and classification scheme were published in Special Libraries, v.54, no.4 (April 1963).

Patrons may locate maps by using one or more of the following aids: 1. Geologic or topographic index map, 2. Card catalog and serials records (for those maps in series), 3. U.S.G.S. lists of open file releases, 4. U.S.G.S. lists of publications, as well as lists from states and foreign countries, and 5. bibliographies in the field of geology, both foreign and domestic.

Acquisitions tools consist largely of dealers catalogs and the bibliographies and lists cited above.

Bibliographies: Address Check Lists of Geological Surveys of the World. Submitted by Eleanor Wilkins, Head, U.S. Geological Survey Library, Menlo Park.

GEOLOGICAL SURVEYS OF THE WORLD **
NORTH AMERICA

Canada

Geological Survey of Canada
Department of Energy, Mines
and Resources
601 Booth Street
Ottawa 4, Canada

Mexico

Instituto de Geologia
Universidad Nacional
Autonoma de Mexico
Ciudad Universitaria
Mexico 20, D.F.

* Boggs, S.W. and Lewis, D.C., The classification and cataloging of maps and atlases. New York, SLA, 1945.

** Compiled by U.S.G.S., Branch of Foreign Geology.

NORTH AMERICA (con't)

Greenland
Grønlands Geologiske
Undersøgelse
Østervoldgade
København K, Denmark

United States
U.S. Geological Survey
Washington, D.C. 20242

CARIBBEAN ISLANDS

Cuba
Instituto Nacional de
Investigaciones
Científicas, Cerro 827
Havana

Jamaica
Geological Survey Department
Hope Gardens
Kingston 6

Dominican Republic
Servicio de Minería
Ministerio de Industria
y Comercio
Santo Domingo

Martinique
Arrondissement Mineralogique
de la Guyane
Boite Postale 458
Fort-de-France

Guadeloupe & Dependencies
Arrondissement Mineralogique
de la Guyane
Boite Postale 448
Pointe-a-Pitre
Guadeloupe

Puerto Rico
Economic Development Admini-
stration
Industrial Research
Mineralogy and Geology Sec.
Box 38, Roosevelt Station
Hato Rey

Haiti
Geological Survey
Department of Agriculture,
Service Geologique
Damiens pres Port-au-Prince

Trinidad and Tobago
Ministry of Petroleum and
Mines
P.O. Box 96
Port-of-Spain
Trinidad and Tobago

CENTRAL AMERICA

Costa Rica
Geological Survey of Costa
Rica
Geologic Dept., University of
Costa Rica, San Pedro de
Montes de Oca
San Jose

Honduras
Departamento de Minas
Direccion General de Recour-
sos Naturales
Comayaquela, D.C.

El Salvador
Centro de Estudios e Investi-
gaciones Geotecnicas
Ministry of Public Works
Apartado Postal 109
San Salvador

Nicaragua
Servicio Geologico Nacional
Ministerio de Economia
Apartado Postal No. 1347
Managua, D.N.

CENTRAL AMERICA (con't)

Guatemala

Seccion de Geologia
 Direccion General de Minería
 e Hidrocarburos
 10a. Calle 11-46, Zona 1
 Guatemala City

Panama

Departamento de Recursos
 Minerales
 Apartado Postal 1631
 Panama City

Seccion de Geologia
 Direccion General de Cartografia
 Avenida Los Americanos 5-76, Zona 13
 Guatemala City

SOUTH AMERICA

Argentina

Instituto Nacional de
 Geologia y Minería
 Avada Julio A., Roca 651
 Buenos Aires

Colombia

Servicio Geologico Nacional
 Apartado Nacional 2504
 Bogota

Bolivia

Ministerio de Minas y Petroleo
 Servicio Geologico de Bolivia
 Avenida 16 de Julio No. 1769
 Casilla Cerreo 2729
 La Paz

Ecuador

Servicio Nacional de Geologia
 y Minería
 Casilla 23-A
 Quito

Brazil

Departamento Nacional da
 Producao Mineral
 Avenida Pasteur 404
 Rio de Janeiro

French Guiana

Bureau des Recherches
 Geologiques et Minieres
 B.P. 42
 Cayenne

Chile

Instituto de Investigaciones
 Geologicas
 Agustinas 785, 5° Pisa
 Casilla 10465
 Santiago

Guyana

Geological Survey Department
 P.O. Box 789
 Brickdam, Georgetown

Paraguay

Direccion de la Produccion
 Mineral
 Tucari 271
 Asuncion

Surinam

Geologisch Mijnbouwkundige
 Dienst
 Dept. van Opbouw
 Klein Wasserstraat 1
 Paramaribo

SOUTH AMERICA (con't)

<p>Peru Servicio de Geologia y Minería Apartado 889 Lima</p>	<p>Uruguay Instituto Geologico del Uruguay Calle J. Herrero y Obes 1239 Montevideo</p>
<p>Venezuela Ministerio de Minas e Hidrocarburos Direccion de Geología Torre Norte, Piso 19 Caracas</p>	

EUROPE

<p>Austria Geologische Bundesanstalt Rasumofskygasse 23 Vienna 111/40</p>	<p>France Bureau des Recherches Geol- ogiques et Minières (BRGM) 17 Rue de la Federation Paris XVe</p>
<p>Belgium Service Geologique de Belgique 13 Rue Jenner, Parc Leopold Brussels 4</p>	<p>Centre Scientifique et Technique BRGM B.P. 818, 45 Orleans La Source</p>
<p>Bulgaria Direction des Mines Ministère des Mines et des Richesses du Sous-sol Sofia</p>	<p>Germany Bundesanstalt für Bodenfor- schung Alfred-Bentz-Haus Postfach 54, Buchholz Hannover 3</p>
<p>Czechoslovakia Ústřední Ústav Geologický Malostranské nám. 19 Prague 1</p>	<p>Great Britain Institute of Geological Sciences Exhibition Road, South Kensington London, S.W. 7</p>
<p>Denmark Danmarks Geologiske Undersøgelse Roadhusvej 36 Charlottenlund</p>	
<p>Finland Geologinen Tutkimuslaitos Otaniemi Near Helsinki</p>	<p>Greece Institute of Geology and Subsurface Research Ministry of Industry 6, Amerikis Str. Athens (134)</p>

EUROPE (con't)

- Hungary**
Magyar Allami
Foldtani Intezet
Nepstadion-ut 14
Budapest XIV
- Iceland**
Department of Geology
and Geography
Museum of Natural History
P.O. Box 532
Reykjavik
- Ireland**
Geological Survey of Ireland
14 Hume Street
Dublin 2, Eire
- Italy**
Servizio Geologico D'Italia
Largo S. Susanna N. 13 -00187
Roma
- Liechtenstein**
Geological Survey of
Liechtenstein
Vaduz
- Luxembourg**
Service Geologique
Direction des Ponts et Chaussées
13 Rue J.P. Koenig
Luxembourg
- Netherlands**
Geologische Stichting
Spaarne 17
Haarlem
- Norway**
Norges Geologiske Undersøkelse
P.B. 3006 Ostmarkneset
Trondheim
- Portugal**
Servicos Geologicos de
Portugal
Rue da Academia das Ciencias
19-2º
Lisboa 2
- Romania**
Comitetul de Stat al
Geologiei
Calea Grivitei 64
Bucuresti 12
- Spain**
Instituto Geologico y Minero
de Espana
Rios Rosas 23
Madrid 3
- Sweden**
Sveriges Geologiska Undersökning
Frescati
Stockholm 50
- Switzerland**
Schweizerische Geologische
Kommission
Bernoullianum
CH 4000 Basle
- Union of Soviet Socialist Republics**
Ministry of Geology and Conservation of Mineral Resources
B. Gruzinskaya, 4/6
Moscow
- Yugoslavia**
Institute de Geologie de
l'Academie
Serbe des Sciences
Belgrade
- Poland**
Instytut Geologiczny
ul. Rakowiecka 4
Warsaw

AFRICA**Algeria**

Direction des Mines et
de la Geologie
Service Geologique
Immeuble Mauretania - Agha
Algiers

Angola

Servicio de Geologia y Minas
Caixa Postal No. 1260-C
Luanda

Botswana

Geological Survey
P.O. Box 94
Lobatsi

Burundi, Republic of

Ministère des Affaires
Economiques et Financieres
Dept. de Geologie et Mines
Boite Postale 745
Bujumbura

Cameroun

Ministere des Transports des
Mines des Postes et Tele-
communications
Direction des Mines et de
la Geologie
Boite Postale 70
Taounde

Chad Republic

La Service des Mines et de la
Republique des Tchad
Service des Travaux Publics
Fort Lamy

Congo

Service des Mines et
de la Geologie
Boite Postale 12
Brazzaville

Congo, Republic of

Service Geologique National
de la Republique du Congo
Boite Postale 898
Kinshasa

Dahomey

Service of Mines and Geology
Ministry of Public Works,
Transport & Telecommunica-
tions
Box 249
Cotonou

Egypt

Geological Survey and Mineral
Dept.
Dawawin Post Office
Cairo

Ethiopia

Imperial Ethiopian Government
Ministry of Mines
P.O. Box 486
Addis Ababa

French Somaliland

Service des Travaux Publics
du Territoire Francais des
Afars et des Issas
Djibouti

Gabon

Direction des Mines
B.P. 576
Libreville

Ghana

Ghana Geological Survey
P.O. Box M 80
Accra

Guinea

Service des Mines et de la
Geologie
Conakry

AFRICA (con't)

- Ivory Coast**
Service Geologique
Boite Postal 1368
Abidjan
- Kenya**
Ministry of Natural Resources
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P.O. Box
Nairobi
- Liberia**
Liberia Geological Survey
Bureau of Natural Resources
and Surveys
P.O. Box 9024
Monrovia
- Libya**
Geologic Division
Ministry of Industry
Tripoli
- Malagasy, Republic of**
Ministere de L'Industrie et
des Mines
Direction des Mines et de
l'Energie
Service Geologique
B.P. 280
Tananarive
- Malawi**
Geological Survey Dept.
P.O. Box 27
Zomba
- Mali**
Ministere des Travaux Publics
des Telecommunications, de
l'Habitat et des Ressources
Energetiques
Bamako
- Mauritania**
Direction des Mines et de
la Geologie
Nouakchott
- Morocco**
Division de la Geologie
Direction des Mines et la
Geologie
Rabat (Challah)
- Mozambique**
Servicos de Geologia e Minas
Caixa Postal 217
Lourenco Marques
- Niger**
Service des Mines et el la
Geologie
Ministere des Travaux Publics
Niamey
- Nigeria**
Ministry of Mines and Power
Geological Survey Division
P.M.B. 2007
Kaduna South
- Reunion**
Service des Travaux Publics
St. Denis
- Rwanda**
Service Geologique
B.P. 15
Ruhengeri
- Senegal**
Direction des Mines et de la
Geologie
B.P. 1238
Dakar
- Sierra Leone**
Geological Survey Division
Freetown
- Somali**
Geological Survey Dept.
Box 41
Hargeisa
- South Africa, Republic of**
Geological Survey
P.B. 112
Pretoria

AFRICA (con't)

- Rhodesia (Omit Southern)
Ministry of Mines and Lands
Geological Survey Office
Causeway P.O. Box 2168
Windhoek
- Spanish Sahara
Direccion General de Plazas
y Provincias Africanas
Servicio Minero y Geologico
Castellana No. 5
Madrid 1
- Sudan
Geological Survey Dept.
Ministry of Mining and Industry
P.O. Box 410
Khartoum
- Swaziland
Geological Survey and Mines
P.O. Box 9
Mbabane
- Tanzania
Ministry of Commerce and
Industries
Mineral Resources Division
P.O. Box 903
Dodoma
- Togo, Republic of
Ministere des Travaux Publics
Mines, Transports, des
Postes et Telecommunica-
tions
Direction des Mines et de
la Geologie
B.P. 356
Lome
- Tunisia
Geological Survey of Tunisia
95, Avenue Mohamed V
Tunis
- Uganda
Geological Survey and Mines
Dept.
P.O. Box 9
Entebbe
- Upper Volta
Direction de la Geologie et
des Mines
Ouagadougou
- Zambia
Ministry of Labour and Mines
Geological Survey Dept.
P.O. Box R W 135
Ridgeway, Lusaka

MIDDLE EAST

- Cyprus
Geological Survey Dept.
3, Electra Street
P.O. Box 809
Nicosia
- Egypt
Geological Survey
Abbasiya Post Office
Cairo, U.A.R.
- Iran
Iranian Geological Survey
P.O. Box 1964
Teheran
- Iraq
Geological Survey Dept.
Directorate of Minerals
Ministry of Oil
Baghdad
- Israel
Geological Survey of Israel
30, Malkhei Israei St.
Jerusalem
- Jordan
Natural Resources Authority
Mines and Geological Survey
Dept.
Amman (Box 2220)

MIDDLE EAST (con't)

Kuwait

Kuwait Oil Affairs Dept.
Ahmadi 94

Lebanon

Direction Generale des
Travaux Publics
Beirut

Saudi Arabia

Ministry of Petroleum and
Mineral Resources
Directorate General of
Mineral Resources
P.O. Box 345
Jiddah

Syria

Dept. of Geological Research
and Mineral Prospecting
Jisr al Abiad
Damascus

Turkey

Maden Tetkik ve Arama
Enstitüsü (MTA)
Posta Kutusu 116
Ankara

United Arab Republic

Dept. of Mines and Fuel
19 Badrawi Ashour St.
Dokki, Cairo

Yemen

Office of Mineral Resources
Ministry of Public Works
Sana

ASIA

Afghanistan

Ministry of Mines and Industry
Mines and Geological Survey
Dept.
Kabul

Borneo

Geological Survey Dept.
Borneo Region, Malaysia
Kuching, Sarawak

Brunei

The Government Geologist
Brunei Town

Burma

Geological Dept.
226 Mahabandoola Street
Box 843
Rangoon

Cambodia

Service des Mines
Phnom-Penh

Ceylon

Geological Survey Dept.,
48, Sri Jinaratana Road
Colombo 2

China

Chinese Ministry of Geology
Peking

India

Geological Survey of India
29 Jawaharlal Nehru Road
Calcutta 16

Indonesia

Geological Survey of Indonesia
Djalan Diponegoro 57
Bandung

ASIA (con't)

Japan
Geological Survey of Japan
135 Hisamoto-cho
Kawasaki, Kanagawa

Korea
Geological Survey of Korea
125 Namyong-dong
Seoul, Korea

Laos
Dept. of Mines
Ministere du Plan
B.P. 46
Vientiane

Malaysia (West)
Geological Survey
Scrivenor Road
P.O. Box 1015
Ipoh

Nepal
Ministry of Industry and
Commerce
Nepal Geological Survey
Lainchaur, Kathmandu

Pakistan
Geological Survey of Pakistan
P.O. Box 15
Quetta

Phillipines
Dept. of Agriculture and
Natural Resources
Bureau of Mines
P.O. Box No. 1595
Manila

Taiwan
Geological Survey of Taiwan
P.O. Box 31
Taipei

Thailand
Royal Dept. of Mineral
Resources
Rama VI Road
Bangkok

Vietnam, Republic of
Direction Generale des Mines
de l'Industrie et de l'
Artisanat
Service Geologique
59, Rue Gia-Long
Saigon

AUSTRALIA AND PACIFIC ISLANDS

Australia
Bureau of Mineral Resources,
Geology, and Geophysics
London Circuit
P.O. Box 378
Canberra City, A.C.T.

Borneo
Geological Survey, Borneo
Region (East Malaysia)
Kuching, Sarawak

British Solomon Islands
Geological Survey Dept.
P.O. Box G-24
Honiara, Guadalcanal

Fiji
Director of Geological
Survey
P.M.B., G.P.O.
Suva

New Caledonia
Service des Mines
Noumea

New Hebrides
New Hebrides Condominium
Geological Survey
British Residency
Vila

New South Wales
 Dept. of Mines
 11 Loftus Street
 Sydney, N.S.W.

New Zealand
 Dept. of Scientific and
 Industrial Research
 New Zealand Geological Survey
 P.O. Box 30368 - Andrews Ave.
 Lower Hutt, Wellington

UNITED STATES STATE GEOLOGICAL AGENCIES

Geological Survey of Alabama
 P.O. Drawer 0
 University of Alabama 35486
 (205) 759-5721

Delaware Geological Survey
 University of Delaware
 Newark, Delaware 19711
 (302) 368-0611

State Division of Mines and
 Geology
 Box 5-300, College
 Alaska 99701
 (907) 856-6351

Division of Geology
 Florida Board of Conservation
 P.O. Box 631
 Tallahassee, Florida 32302
 (904) 224-7141

Arizona Bureau of Mines
 University of Arizona
 Tucson, Arizona 85721
 (602) 884-2733

Dept. of Mines, Mining, and
 Geology
 19 Hunter Street, S.W.
 Atlanta, Ga. 30334
 (404) 522-7076

Arkansas Geological Commission
 446 State Capitol
 Little Rock, Arkansas 72201
 (501) FR5-4646

Division of Water and Land
 Development
 Dept. of Land and Natural
 Resources
 P.O. Box 373
 Honolulu, Hawaii 96809
 (808) 50511

Division of Mines and Geology
 California Dept. of Conserva-
 tion
 Ferry Building
 San Francisco, California 94111
 (415) 557-1458

Idaho Bureau of Mines and
 Geology
 Moscow, Idaho 83843
 (208) 882-3732

Mining Industrial Development
 Board
 204 State Office Building
 Denver, Colorado 80202

Illinois State Geological
 Survey
 121 Natural Resources Building
 Urbana, Illinois 61801
 (217) 344-1481

Connecticut Geological and
 Natural History Survey
 Box 128, Wesleyan Station
 Middletown, Conn. 06457
 (203) 346-0788

Dept. of Natural Resources
 Geological Survey
 611 N. Walnut Grove
 Bloomington, Indiana 47401
 (317) 337-5582

Iowa Geological Survey
Geological Survey Building
16 West Jefferson St.
Iowa City, Iowa 52240
(319) 338-1173

State Geological Survey of
Kansas
The University of Kansas
Lawrence, Kansas 66044
(913) 864-3101

Kentucky Geological Survey
University of Kentucky
307 Mineral Industries Building
Lexington, Kentucky 40506
(606) 258-9000

Louisiana Geological Survey
Box G, University Station
Baton Rouge, Louisiana 70803
(504) 348-2201

Maine Geological Survey
State Office Building, Rm 211
Augusta, Maine 04330
(207) 623-4511

Maryland Geological Survey
214 Latrobe Hall, John
Hopkins University
Baltimore, Maryland 21218
(301) 235-0771

Michigan Dept. of Conservation
Geological Survey Division
Stevens T. Mason Building
Lansing, Michigan 48926
(517) 373-1256

Minnesota Geological Survey
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-3372

Mississippi Geological, Economic
& Topographical Survey
P.O. Box 4915
Jackson, Miss. 39216
(601) 362-1056

Division of Geological Survey
and Water Resources
P.O. Box 250
Rolla, Missouri 65401
(314) 364-1752

Montana Bureau of Mines and
Geology
Montana College of Mineral
Science and Technology
Butte, Montana 59701
(406) 792-8321

Conservation and Survey Division
University of Nebraska
113 Nebraska Hall
Lincoln, Nebraska 68508
(402) 477-8711

Nevada Bureau of Mines
University of Nevada
Reno, Nevada 89507
(702) 323-2081

Dept. of Resources and Economic
Development
Geologic Branch, Dept. of Geo-
logy
James Hall, University of New
Hampshire
Durham, New Hampshire 03102
(603) 868-5511

New Jersey Bureau of Geology
and Topography
John Fitch Plaza, Room 709
P.O. Box 1889
Tranton, New Jersey 08625
(609) 292-2576

New Mexico Bureau of Mines and
Mineral Resources
Campus Station
Socorro, New Mexico 87801
(505) 835-5272

New York State Museum and
Science Service
Geological Survey
New York State Education Bldg.,
Room 973
Albany, New York 12224
(518) 474-5816

Division of Mineral Resources
 Dept. of Conservation and Development
 P.O. Box 2719
 Raleigh, North Carolina 27602
 (919) 829-3833

North Dakota Geological Survey
 University Station
 Grand Forks, North Dakota 58202
 (701) 777-2231

Ohio Division of Geological
 Survey
 1207 Grandview Avenue
 Columbus, Ohio 43212
 (614) 469-5344

Oklahoma Geological Survey
 The University of Oklahoma
 Norman, Oklahoma 73069
 (405) JE6-0900

State Dept. of Geology and
 Mineral Industries
 1069 State Office Building
 1400 S.W. Fifth Avenue
 Portland, Oregon 97201
 (503) 226-2161

Bureau of Topographic and
 Geologic Survey
 Dept. of Internal Affairs
 Harrisburg, Penna. 17120
 (717) 787-2169

Division of Geology
 P.O. Box 927
 Columbia, South Carolina 29202
 (803) 758-3257

South Dakota State Geological
 Survey
 Science Center, University of
 South Dakota
 Vermillion, South Dakota 57069
 (605) 624-4471

Dept. of Conservation
 Division of Geology
 G-5 State Office Building
 Nashville, Tennessee 37219
 (615) 741-2726

Bureau of Economic Geology
 The University of Texas
 University Station, Box X
 Austin, Texas 78712
 (512) GRI-1534

Utah Geological and Mineralogical
 Survey
 103 Utah Geological Survey
 Building
 University of Utah
 Salt Lake City, Utah 84112
 (801) 322-6831

Vermont Geological Survey
 University of Vermont
 Burlington, Vermont 05401
 (802) 864-4511

Virginia Division of Mineral
 Resources
 P.O. Box 3667
 Charlottesville, Virginia 22903
 (703) 293-5121

Washington Division of Mines
 and Geology
 335 General Administration
 Building
 Olympia, Washington 98501
 (206) 753-6183

West Virginia Geological and
 Economic Survey
 P.O. Box 879
 Morgantown, West Virginia 26505
 (304) 296-4461

Wisconsin Geological and
Natural History Survey
University of Wisconsin
1815 University Avenue
Madison, Wisconsin 53706
(608) 262-1705

Geological Survey of Wyoming
P.O. Box 3008, University
Station
University of Wyoming
Laramie, Wyoming 82070
(307) 745-3129

Resume of: "Arrangement and Organization of Geologic Maps in the Library" by Beatrice Lukens, Head, Earth Sciences Library, University of California, Berkeley.

The arrangement and organization of maps in the Earth Sciences Library at UC Berkeley is based on what seemed expedient in response to user requests. Material had to be readily available, so users could help themselves and the collection would not require excessive upkeep. The aim was to give the most service with the least effort.

Considering user approach, the maps were separated by the type of map. Topographic maps were arranged alphabetically, first by state and then by quadrangle name. Topographic maps of California are most heavily used. Since users would be looking at 15 minute quads or 7.5 minute quads at any one time, topographic sheets for California were divided into two sections, 7.5 minute and 15 minute with 30 and 60 minute, each section arranged alphabetically by quadrangle name. A separate alphabetical file is maintained for 1:250,000 topographic sheets of the United States. A shelf list form card is used to make a record of holdings.

Arizona

Mesa

1969

Publisher: U.S. Geological Survey

Scale: 1:24,000

Extent: 7.5 min.

Contour interval: 100 feet

{ Sample of shelf list
card for topographic
sheets }

Users may find the name of a desired quadrangle by consulting the U.S.G.S. Indexes to topographic maps of the various states.

The series issued by the U.S. Geological Survey, GQ, HA, MI, etc., are received folded and are filed by symbol as assigned by the U.S.G.S. and then numerically. The holdings record is kept on a numbered serials record card. Access to the contents of these series is through the Publications of the Geological Survey, 1879-1961 published by the U.S.G.S. with its supplements and George H. Albertson's Geological index to the publications of United States Geological Survey and Hayden, King, Powell, and Wheeler Surveys.

The third group of maps are geologic maps issued as individual sheets or issued as sets which are meant to be used together as flat sheets or mounted to make a wall map. This group has been classified by country or state. A shelf list card has been made which is filed by area and an index file has been made to areas.

15.A6 Ge 1969	Arizona Geologic map of Arizona, by Eldred D. Wilson and Richard T. Moore, Arizona Bureau of Mines, and John R. Cooper, U.S. Geological Survey. U.S.G.S., 1969.
	1 sheet 66.5 X 44.5 in.
	Scale: 1:500,000. Contour interval: 500 feet. Datum is mean sea level. Lists "Sources of data" and "References cited".

○ Sample of shelf list card for geologic maps classified by area ,

15.A6 Arizona

Sample of Index card
for areas

If an issuing agency has sent its maps folded and in envelopes, they have been kept that way for ease in finding and filing. The Geologic map of California, issued by the California Division of Mines, is kept both as sheets and as an atlas. Whenever a map and text would be used together, they have been kept together and cataloged for the book collection. Some maps which had previously been removed from publications were returned to them. Users expect to find maps with the texts.

The classification scheme used to assign numbers for areas is the one used in the UC Berkeley Map Room, but subject notation has not been followed. Since subject subdivisions were limited, it seemed easier for the user if letter symbols such as "Fa" for fault, "Ge" for geology, "To" for topography, "Mi" for minerals were used.

Panel II: Nautical Charts

Bibliography cited from: "Nautical Charts in the Map Library" by
Carlos Hagen, Head, UCLA Map Library.

Title: International Hydrographic Bureau. Yearbook
Place published: Avenue President - J.F. Kennedy
Monte Carlo
Principante de Monaco

Contains a listing of hydrographic offices and nautical chart producers throughout the world.

Bibliography from: "Oceanographic Surveys of the Scripps Institution of Oceanography" by Barry Gardner-Smith, Map Librarian, Scripps Institution of Oceanography.

Cowen, Robert C. Frontiers of the Sea, the Story of Oceanographic Exploration. Doubleday and Company, Inc. New York, 1960.

Fisher, Robert L. ed. California, University of. San Diego. Scripps Institution of Oceanography. Preliminary Report on Expeditions MONSOON & LUSIAD, 1960-63. La Jolla, California. 1964.

Gross, Grant M. Oceanography. Charles E. Merrill Publishing Co. Columbus, Ohio. 1967.

Menard, Henry W. Anatomy of an Expedition. McGraw-Hill Book Company. New York, N.Y. 1969.

Raitt, Helen and Moulton, Beatrice. Scripps Institution of Oceanography, First Fifty Years. The Ward Ritchie Press. 1967.

Bibliography from: "Historical Nautical Charts" by Ruthanne Lowe, Library Assistant, UCLA Map Library

Some of the books listed, although general in nature, contain chapters or sections on the history of nautical charts. In addition, several of them (Brown, Robinson, Tooley, Bowditch) contain good bibliographies.

Allison, Ivan E. Navigation and Astronomy for Students. George G. Harrap and Company Ltd. London. 1948.

Bagrow, Leo. History of Cartography. C.A. Watts & Co., Ltd. 1964.

Brown, Lloyd A. The Story of Maps. Bonanza Books. New York. 1949.

Deacon, G.E.R. ed. Seas, Maps, and Men, an Atlas-History of Man's Exploration of the Deep. Crescent Books, New York. 1962.

Debenham, Frank. Discovery and Exploration, an Atlas-History of Man's Journeys into the Unknown. Paul Hamlyn. London. 1960.

Fawcett, Stanley. "Problemes de la tenue a jour des cartes de l'Amirauté Britannique", Internationales Jahrbuch Fur Kartographie. v. 1965. C. Bertelsmann Verlag. 1965.

Garnett, John. "Description and Use of a New and Simple Nautical Chart". Transactions of the American Philosophical Society. vol. 6, pp. 303-18. Philadelphia. 1804.

National Archives. United States Scientific Geographical Exploration of the Pacific Basin, 1783-1899. prep. by Herman R. Friis, et. al. Washington, D.C. 1961.

Ritchie, G.S. The Admiralty Chart, British Naval Hydrography in the Nineteenth Century. Hollis and Carter. London.

Robinson, A.H.W. Marine Cartography in Britain, A History of the Sea Chart to 1855. Leichester University Press. Oxford. 1962.

Tooley, R.V. Maps and Map-Makers. Bonanza Books. New York. 1961.

U.S. Army Map Service, Corps of Engineers. Map Intelligence. 2nd ed., Army Map Service. Washington, D.C. 1954.

U.S. Coast and Geodetic Survey. Cartography, A Review and Guide for the Construction and Use of Maps and Charts. By Charles H. Deetz. Special Pub. No. 205. Washington, D.C. 1943.

U.S. Coast and Geodetic Survey. "Engravings of Early Coast and Geodetic Survey Charts". Washington, D.C.

U.S. Coast and Geodetic Survey. "The United States Coast and Geodetic Survey Products and Functions". Washington, D.C.

U.S. Navy Hydrographic Office. American Practical Navigator, An Epitome of Navigation. Originally by Nathaniel Bowditch. H.O. Pub. No. 9. Washington, D.C.

U.S. Navy Hydrographic Office. United States Surveys in the Pacific, 1900-1960. By Robert H. Randall, Jr. Washington, D.C. 1961.

Wilkes, Charles. Voyage Round the World, Embracing the Principal Events of the Narrative of the United States Exploring Expedition. George Putnam, 1851.

The following periodicals frequently contain articles and book reviews pertaining to the history of navigation and chart making:

- The American Neptune (Salem)
- The International Hydrographic Review (Monaco)
- The Journal of the Institute of Navigation (London)
- The Nautical Magazine (Glasgow)
- Navigation, Journal of the Institute of Navigation (Los Angeles)
- Navigation, Revue Technique de Navigation Maritime et Aérienne (Paris)
- United States Naval Institute Proceedings (Annapolis)

James McNeill Whistler worked for the Engraving Section of the Coast and Geodetic Survey from November 1854 until February 1855. Facsimiles of one of the two charts he produced ('Anacapa Island, California, 1854,' no. 414A) as well as 'Sketches by Whistler, November 1854', no. 414B may be obtained free of charge by writing to:

Map Services Branch
Coast and Geodetic Survey
Washington Science Center
Rockville, Maryland 20852

Another publication about Whistler entitled "Three Short Happy Months" (The story of Whistler, the artist, complete with his sketches), may also be obtained free from the above.

Panel III: Free and Inexpensive Maps

Resume of: "California State Agency Maps" by Ruth Elwonger, Librarian, California State Library.

California State documents consist mainly of: 1. statistics and 2. maps! Innumerable maps appear incidentally as part of the text of State publications because maps are a very good means of presenting information in concise form.

In many additional State documents, maps are the most significant part of the publication, even though the publication is housed apart from the map collection. Examples would be:

Department of Parks and Recreations' series of brochures on State parks, which include maps of trails and roads within park boundaries;
Department of Fish and Game's series, Angler's Guides;
Volume 2 of the San Francisco Bay Plan by the San Francisco Bay Conservation and Development Commission, which consists of 19 fold-in maps of the San Francisco Bay;
The numerous publications of the Departments of Water Resources and the Division of Mines and Geology.

It is most important for the map librarian, therefore, to know a great deal about the availability of maps in the State's publications.

The State produces a large number of extremely technical maps which are often available for consultation in the issuing office, as prints, or by purchase. Examples are:

County Road System maps of the Division of Highways;

Soil-Vegetation Maps of the Division of Forestry
Original mapping done by the design offices of the
Departments of Water Resources and the Division of
Highways, based on aerial photographs.

Whether your interest is in a geographic area, such as a county, or in a subject field, there is a wealth of map material produced by State agencies. Two publications which will help in finding sources of technical and specialized maps are:

Introduction to State Information Sources (a pamphlet available from the Government Publications Section, California State Library);
California State Telephone Directory (includes the most up-to-date and detailed organization chart of State government. Issued biennially and sold by Documents and Publications, P.O. Box 20191, Sacramento 95820) \$1.50 plus tax.

Bibliography from: "California State Agency Maps" by Ruth Elwonger, Librarian, California State Library

California Dept. of Fish and Game
1416 Ninth Street, Sacramento 95814

Angler's Guides:

Mineral King Area (Tulare County)
Bear Creek (Fresno County)
Crown Valley Area (Fresno Area)
Emigrant Basin Area (Tuolumne County)
Lake Tahoe (Placer and El Dorado Counties)
French Canyon and Humphreys Basin (Fresno County)
Mono Creek Area (Fresno County)
Granite Creek Area (Madera County)
Trinity Alps Area (Siskiyou and Trinity Counties)
Trinity Divide Area (Trinity, Siskiyou, and Shasta Counties)
Marble Mountains Area (Siskiyou County)
Salmon and Scott Mountains (Siskiyou and Trinity Counties)
Striped Bass Fishing Map (S.F. Bay and Delta)
Salmon and Steelhead Fishing Map
Upper Bishop Creek Drainage Area (Inyon County)
Klamath River (Del Norte, Humboldt, and Siskiyou Counties)

Order from: Documents & Publications
P.O. Box 20191
Sacramento 95820

Each guide, 1-5 copies, 35 cents plus sales tax;
 6-9 copies, 30 cents plus sales tax;
 10 or more copies, 10 cents plus sales tax.

Provide detailed information on trout fishing in specific out-of-the-way places in California mountains and on special fisheries.

Ocean Fishing Maps:

Del Norte, Humboldt, and Mendocino Counties
 Sonoma and Marin Counties
 San Francisco, San Mateo, and Santa Cruz Counties and the
 Elkhorn Slough Area, Monterey County
 Monterey and San Luis Obispo Counties

California Division of Forestry
 1416 Ninth Street, Rm. 1550, Sacramento 95814

Ranger Unit Maps

\$1.00 each including tax

Amador, 1960
 Butte, Rev. 1965
 Calaveras (Contains parts of Stanislaus, San Joaquin,
 and Sacramento Counties), 1959
 Colusa, 1947
 Del Norte, 1953
 El Dorado, Western, Rev. 1963
 Fresno, Eastern, 1954
 Fresno, Western, 1954, Rev. 1964
 Glenn, Rev. 1967
 Humboldt, Northern, Rev. 1950
 Humboldt, Southern, 1949
 Kings, 1961
 Lake, Southern, 1956
 Lassen, Northern, Rev. 1963
 Lassen, Southern, Rev. 1963
 Madera, Western, 1952
 Mariposa, Western, 1962
 Mendocino, Northern, Rev. 1950
 Mendocino, Southern, Rev. 1950
 Merced, Western, 1955
 Monterey, Northern - San Benito (one map), Rev. 1967
 Monterey, Southeastern, Rev. 1967
 Monterey, Southwestern, Rev. 1967
 Napa-Solano-Yolo, 1963

Orange, 1952
 Placer-Nevada-Yuba, Western portions (one map), 1959
 Riverside, Central, Rev. 1962
 Riverside, Western, Rev. 1962
 San Bernardino, Southwestern, 1956
 San Diego, Rev. 1962
 San Luis Obispo, Rev. 1967
 San Mateo, 1964
 Santa Barbara
 Santa Clara - Mt. Hamilton Unit, Rev. 1954
 Santa Cruz Mountains, Rev. 1961
 Shasta, Eastern, Rev. 1963
 Shasta, Western - Trinity, Eastern (one map), Rev. 1962
 Siskiyou, Eastern, 1955
 Siskiyou, Western, Rev. 1966
 Sonoma, Rev. 1963
 Tehama, Rev. 1967
 Tulare, Rev. 1965
 Tuolumne, 1949

Scale $\frac{1}{2}$ " - 1 mile. Are used for fire fighting but are very popular maps showing road and jeep trails, rivers, streams, township and range lines, etc.

The following maps are also available:

Alderpoint-Covelo (Contains parts of Humboldt, Mendocino, Trinity, Tehama, and Glenn Counties) - 1954, $\frac{1}{2}$ " - 1 mile, - \$1.00

Jackson State Forest (Mendocino County) - 1964, 1" - 1 mile, - \$1.00

Jackson State Forest Topographic - 1964, 1" - 1 mile. - \$1.00

State Forestry Facility Map - Rev. 1963 - \$2.00

State Fire Protection Map by Agency - Rev. 1966 Colored - \$2.00

Lassen-Modoc Ranger Unit, Modoc County - 1967 - \$1.00

Soil-Vegetation Maps

Approximately 350 maps

45 cents each; legend 10 cents. Sold by U.S. Forest Service, 630 Sansome St., San Francisco 94111

Timber Stand Maps

Approximately 500 maps

" " "

<u>Upland Soils of Lake County</u>	\$1.00 each, colored and un-
<u>Upland Soils of Mendocino County</u>	colored. Sold by Documents
<u>Upland Soils of Glenn County</u>	& Publications, P.O. Box
	20191, Sacramento 95820
	" " "

Index key and list, and detailed information as to prices of the above maps appear on pp. 22-31 of Soil-Vegetation Surveys In California, published by the California Division of Forestry. Or, maps may be ordered by name of quadrangle.

California Dept. of Harbors and Watercraft
1416 Ninth St., Rm. 1336, Sacramento 95814

Boating Facilities Guide, Southern Area Free
Guides for Northern and Central Areas are out of print.

California Division of Highways
c/o Chief Engineer
P.O. Box 1499, Sacramento 95807

County Road System Maps 40 cents per sheet plus tax
4" - 1 mile and 8" - 1 mile; 18" X 18"
1100 sheets which emphasize the rural portions of the State. Show road and highway numbers, important physical features, water courses, place names, railroads, dams, jurisdictional boundaries, and section lines.

County Composite Maps ¼" - 1 mile, 50 cents per
Composites of the County County; ½" - 1 mile, 75
Road System Maps. cents per County
Vary in size according to size
of County.
For ordering information, write for Index Map and Tabulation.

County Outline Map
Shows county seats only. In ozalid, blue-line and available in sizes ranging from 8" X 11" to 8' X 3'. Almost any desired overlay in any combination can be produced showing rivers, cities, freeways, urbanized areas, etc.

Projected Boundaries 1985 Urban Areas 7½ cents per sq. ft.

Sacramento Metropolitan Area Map 7½ cents per sq. ft.
Map by the Sacramento City Planning Commission is sold with overlays of freeways and State Highways.

	\$1.50 plus tax
<u>California Freeway and Expressway System, Planning and Construction Progress.</u> Jan. 1969. (annual)	
<u>California State Highway Map</u> (annual)	25 cents plus tax
<u>California Aerial Photographic Coverage</u> (annual)	Free to public agencies
1968 edition consists of 18 maps and an index key.	\$10.00 to private companies or individuals
California Division of Mines and Geology Ferry Building San Francisco 94111	
<u>County Maps</u>	25 cents to \$1.00
First appeared in the Reports of the State Mineralogist, the California Journal of Mines and Geology, and in the new County Report series.	
<u>Map Sheets</u>	\$1.00 to \$1.50
New series, not reprints, to publish information quickly that would normally appear in reprint.	
<u>Geologic Atlas</u>	\$1.50 per map sheet; 50 cents uncolored
Consists of 27 sheets, scale 1" = 4 miles	
<u>Geologic Quadrangles</u>	25 cents to \$1.00
These are not a separate series but are overruns of maps which originally appeared as part of Bulletins, Special Reports, California Journal of Mines and Geology, and the new Map Sheet Series.	
<u>California Shaded Relief Map</u> 1" = 20 miles	\$1.50 plus tax
<u>Geologic Map of California</u> 1" = 40 miles; size 16" X 20"	25 cents plus tax
Detailed listings and prices will be found in <u>List of Available Publications</u> , July 1969.	

California Dept. of Water Resources
1416 Ninth St., Sacramento 95814

California Water Resources Development Free
1:750,000; 5' X 5'

U.S. Geological Survey Maps

Federal-State Cooperative Topographic Mapping Program with the U.S. Geological Survey administered in California by the Dept. of Water Resources which determines priorities and scheduling. Financing may be joint or Federal.

The Dept. of Water Resources publishes Topographic Mapping in California (Bulletin 79-64 and supplements) which lists all maps produced in the standard quadrangle format.

HOW TO OBTAIN U.S. GEOLOGICAL SURVEY MAPS

1. Over the counter sales

Sacramento: Ogden Surveying Equipment Co., 5520 Elvas Ave. 455-4886

Sacramento: A-1 Map Sales Center, 3271 Folsom Blvd.

San Francisco: U.S. Geological Survey, Public Inquiries Office, Rm. 504 Custom House, 555 Battery Street

Los Angeles: U.S. Geological Survey, Public Inquiries Office, Rm. 7638 Federal Building, 300 N. Los Angeles St.

Menlo Park: U.S. Geological Survey, Map Distribution Office, 345 Middlefield Road (415) 325-6761

2. Mail orders

U.S. Geological Survey, Map Distribution Office,
Building 25, Federal Center, Denver, Colorado 80225

California Public Utilities Commission
350 McAllister St., San Francisco 94102

Electric Service Areas, July 1969 \$2.50

Electric Generating Stations, Transmission Lines and Interconnecting Systems, Dec. 1967 \$2.00

Principal Gas Transmission and Distribution Trunk Lines, July 1961 \$1.50

Gas Service Areas, Jan. 1968 \$2.00

Telephone Exchange Areas, May 1964 \$1.50

Telephone Toll Routes, April 1962 \$1.50

California. Legislature. Assembly. Committee on Elections and Reapportionment.

Assembly Districts, 1965, 2nd Extraordinary Session 10 cents
Single map in various sizes may be obtained from the
Legislative Bill Room, State Capitol, Sacramento 95814.

Detailed maps are out of print except for a few Assembly districts. Senatorial and Congressional district maps are no longer available.

Bibliography from: "Free and Inexpensive Maps for the Public Library"
by John Fetros, Librarian, San Francisco Public Library.

Private Map Publishing

California State Automobile
Association
150 Van Ness Avenue
San Francisco, Calif. 94101

SFPL put on mailing list and a set of state, city, section maps published by AAA, CSAA, Auto Club of So. Calif. furnished.

George F. Cram Co., Inc.
301 So. LaSalle St.
Indianapolis, Indiana

Publishes Cram's Modern Series of pocket maps in folders of uniform size of countries and areas. Priced at 50 cents each.

Gulf Tourgide Bureau
Gulf Building
714 Main Street
Houston, Texas 77002

SFPL sent a complete set of city maps.

Hagstrom's Maps
311 Broadway
New York, New York 10007

Covers the New York area at prices from 50 cents to \$1.00.

Metsker Maps
111 So. Tenth St.
Tacoma, Washington
or
1222 Third Avenue
Seattle, Washington

County maps for Calif., Oregon, Wash., and Idaho showing roads, trails, creeks, rivers, lakes, rr, towns, schools, camps, townships, land grants, airfields. For sportsmen, realtors, timbermen, exploration.

Mobil Oil Corporation
Travel Service
150 East 42nd Street
New York, New York 10017

Their booklet "America's Waterways" indicates sources for waterway charts and maps. Four guides published by Mobil Oil to cruising are noted. Also noted are government sources in this area.

Rand McNally and Company
P.O. Box 7600
Chicago, Illinois 60680

Publishes wide variety of folded maps, atlases, and guides. Publisher's Catalog also describes Kummerly and Frey Europe road maps that Rand McNally handles.

Thomas Brothers Maps
550 Jackson St.
San Francisco, Calif. 94133
or
1326 So. Broadway
Los Angeles, Calif. 90015

Publishes a price list giving cities and prices of what they have produced.

Triumph Press
P.O. Box 75445
Sanford Station
Los Angeles, Calif. 90005

Publishers of Kym's Guide, a series of small maps at 35¢ each used for fishing, hunting, hiking camping, showing also trailer parks and resorts. Includes charts of rivers and bays.

Weekend Outdoor Productions
P.O. Box 878
Oakland, Calif. 95604

Shows lakes and other areas in Northern Calif. Small map at 35-70 cents each.

Wilderness Press
2440 Bancroft Way
Berkeley, Calif. 94704

Fishing and hiking maps at prices from 95 cents to \$1.50

Wildlife and Recreation Services
P.O. Box 21-4152
Sacramento, Calif. 95821

Fishing and hunting maps basically reproduced from Forest Service maps but with additions. In folders at \$1.25 each covering Calif. areas.

Publishers of Foreign Maps

Bartholomew
12 Duncan Street
Edinburgh 9, Scotland

Atlases, touring guides, street maps, mostly of the British Isles. Some historical maps. Of notable interest is a 21 sheet world series of topographical

ESSO Touring Service
Foreign Department
15 West 51st St.
New York 19, New York

Falk-Verlag
Burchardstrasse 8
Hamburg 1, Germany

Kummerly and Frey A.G.
Hallerstrasse 6
Berne, Switzerland

Pneu Michelin
Services de Tourisme
97 B. Pereire
Paris 17

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normally maps at "larger scales than are offered in an atlas".

Road maps of foreign countries. SFPL not on any standing order basis but some isolated maps on file with this address.

Street plans for European cities in handy folders of uniform size.

European, country, and regional maps, road maps, road atlases and continent maps. Mostly priced at \$1.95 to \$2.95. Available through Rand McNally Map Store.

Road maps. Price is about \$1.30 each. A selection available through Rand McNally Map Store.

Sources listing a variety of maps and atlases from all sources

Educators Grade Guide to Free Teaching Aids
Educators Progress Service
Randolph, Wisconsin 53956

In the section on visual and audio visual aids lists a selection of maps available from trade association, and U.S. and foreign agencies. Brief listing most useful to the smaller libraries.

Educators Guide to Free Science Materials
Educators Progress Service
Randolph, Wisconsin 53956

Lists under charts, exhibits, posters some special subject maps such as the Astrosolar map, (GE); a daily weather map, (Weather Bureau), Forests and trees of the U.S., (American Forests Products).

Western distributor:
Educational Materials Service
P.O. Box 1921
La Jolla, Calif. 92037

Also includes listing for several useful pamphlets such as "Elementary Map and Compass Instruction" by the Silva, Inc. 702 Ridgeway St., La Porte, Indiana 46350 designed for the elementary level and giving practical suggestions on how to teach map use and compass reading.

Telberg Book Corp.
Sag Harbor, New York 11963

While the catalogs of this company are so comprehensive they are of most use to larger map libraries, they are worth scanning because they do pick up some inexpensive atlases that may otherwise be missed. The value of reviewing these catalogs is increased because they are annotated so that the contents of the atlas can be determined before buying. For instance, "Depository Page 145 Item 834 Ghana Junior Atlas 1965, 30 11 X 8 pts, gazet. phy. polit and topical maps, city plans, tribal regions, Polit maps of Afr. gives independence dates. \$4.80.

Map Stores in San Francisco

George E. Butler Company
356 California St.
San Francisco, Calif. 94104

Marine, Aeronautical charts and atlases.

Rand McNally Map Store
423 Market St.
San Francisco, Calif. 94105

Business, school, domestic, and foreign travel maps, gov. topographic and aeronautical maps, globes, atlases.

Thomas Brothers Maps
550 Jackson St.
San Francisco, Calif. 94133

Wall maps, street guides, relief maps, globes, USGA.

San Francisco Sources for Government Maps

U.S. Forest Service
630 Sansome St.
San Francisco, Calif. 94111

Provides free maps of National Forests.

U.S. Geological Survey Office
504 Custom House
555 Battery St.
San Francisco, Calif.

Over the counter sales of topographic maps.

Useful tools to build the collection

Europa Yearbook
2 volumes Europa Pubs. Ltd.
\$47.50

Lists under "Tourism" under each country the headquarters of the country's tourist bureau and also the cities in the world in which there are branch offices. Valuable since it lists cities in the United States with a bureau. These will likely have the maps or other data of most interest to smaller U.S. libraries.

U.S. Dept. of State Foreign
Consular Offices in the
United States
Washington 35 cents

Useful as a source of consulate offices which can provide maps and other tourist information.

List of Chambers of Commerce
in the United States
Johnson Publishing Co.
Box 455
Loveland, Colorado \$3.00

Useful for building a mailing list for maps and other tourist information on cities and for trying to get material on particular cities to fill gaps in the collection.