WESTERN ASSOCIATION OF MAP LIBRARIES
Department of Geography
University of California
Berkeley, CA 94720

"...to encourage high standards in every phase of organization
and administration of map libraries..."
New Series of International Bathymetric Charts, by Carlos B. Hagen ... 3
Maps Are Not For Folding, by Wally Trabing ......................... 9
Minutes, WAML Meeting, May 10-11, at Fresno, by Sue Trevitt ........ 10
Attendance List, WAML Meeting, May 10-11, at Fresno ............... 11
Program, WAML Meeting, May 10-11, at Fresno ..................... 12
Next WAML Meeting Announced ...................................... 12
History of Cartography Exhibit, by Roy V. Boswell ................. 13
Environmental Remote Sensing Applications Laboratory, Oregon State University, by David W. Schacht and Barry J. Schrumpf .... 20
New Mapping of Western North America ............................. 26
Gifts & Exchange ................................................................ 27
Publications of Relevance ................................................. 29
Australian Map Curators' Circle established ........................... 32
Atlases Catalogued at UCLA ............................................. 35
Coffee Culture in Guatemala: Location and Movement, by Michael Biechler 36
Map Collection at California State University, Fresno, by Herbert Fox 43
Bench Marks! (personal notes about WAML Members) .............. 45
Periodical and Bibliographic Sources for Geography Book and Atlas Selection, by Sandra J. Lamprecht ................................. 46
Index to Volume 5 ............................................................. 51

Officers of the Western Association of Map Libraries 1973/74

President: Beatrice L. Lukens, Earth Sciences Library, University of California, Berkeley

President-Elect: Gail N. Neddermeyer, Documents Department, University of California, Berkeley

Secretary: Susan Trevitt, Map Room, University of Oregon, Eugene

Treasurer: Stanley D. Stevens, Map Collection, University of California, Santa Cruz

Past President: Herbert S. Fox, Library, California State University, Fresno
The Information Bulletin is published 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 (to encourage high standards in every phase of the organization and administration of map libraries).

Membership Dues: Individual Members residing within the Principal Region may participate by serving as an Officer, vote, attend meetings, and receive the Information Bulletin. $5.00 per fiscal year (July thru June); mid-year joiners will receive back-issues of the Information Bulletin for that year.

Associate Members are those who reside outside the Principal Region, and may participate by attending meetings, serving in an advisory capacity on a committee, and receive the Information Bulletin. $5.00 per fiscal year.

Lifetime Individual Membership is open to individuals only for a one-time payment of $200. All Lifetime Members may participate with the same rights as Individual Members, but in addition to the Information Bulletin will receive a copy of each Occasional Paper.

Institutional Members are commercial firms or educational organizations. The Institution may designate one of its staff to be the official representative for attendance at meetings. The official representative has all the rights of Individual Membership, but may not hold office. The Institution will receive one copy of each issue of the Information Bulletin and each Occasional Paper issued during the year of membership). $25.00 per fiscal year.

Back issues of the Information Bulletin are available for $5.00 per volume, or portion thereof, from the Editor.

Subscriptions to the Information Bulletin are available at $5.00 per volume-year; three issues per volume-year: November, March, June.

Editor: Stanley D. Stevens
University Library
University of California
Santa Cruz, CA 95064 (phone ac408/429-2364)

The Information Bulletin is indexed in Library Literature, and Library and Information Science Abstracts; Surveying and Mapping/American Cartographer.
New Series of

International Bathymetric Charts(1)

by

Carlos B. Hagen

Head, UCLA Map Library

In the early 1970s three new series of international hydrographic-bathymetric charts have appeared:

GEBCO (General Bathymetric Charts of the Oceans)

This series of charts at the scale 1:10,000,000 is the result of an agreement reached in 1965 between the International Hydrographic Bureau in Monaco with the Institute Geographique National of France. The IGN has been assigned the task of preparing, publishing and issuing the new series of GEBCO charts. These charts are simply a much updated follow-up of the famed International Bathymetric Charts of the oceans published in the first half of the twentieth century by the International Hydrographic Bureau in Monaco. As a matter of fact, the index of the new GEBCO charts is the same index used by the earlier charts published by the IHB.

GEBCO Plotting Sheets

The new GEBCO series described above will be based directly on working plotting sheets produced at the scale 1:1,000,000. To this effect, the world oceans and seas have been divided among a number of areas, each one the responsibility of a volunteer hydrographic office. So far twenty hydrographic services from nineteen countries have volunteered to undertake the extensive work of sounding the areas for which they are responsible and producing the GEBCO Plotting Sheets. So far, there are two different types of indexes for these plotting sheets. One could be called the "British System" which is being followed by most countries. Under this system, each sheet covers an area of 6 degrees of latitude by 9 degrees of longitude on the equator up to 30 degrees of longitude in the Arctic and Antarctic regions. The other indexing system could be called the "American" and is the one followed by the U.S. and Japan. Under this indexing system, the quadrangles are more uniformly divided, being generally from 2 to 6 degrees of latitude by 10 degrees of longitude for most areas except the Arctic where the squares have a spread of 15 to 20 degrees of longitude.(2) The soundings on the GEBCO Plotting Sheets will be in meters and they will be produced only as ozalid prints or low cost multilith prints. In this sense they will not be maps or charts but simply as their name indicates only plotting sheets or diagrams. However, they are invaluable as these sheets are far more detailed and precise than the final product will be, that is the GEBCO charts produced by the IGN in France. A list is attached at the end of this article with the addresses of the hydrographic services or their authorized agents for the 19 countries responsible for the preparation of this series of GEBCO Plotting Sheets.
International (INT) Series

This INT series represents the first international cooperative attempt at producing a uniform set of general (small scale) navigational charts for the oceans and seas of the world. This series has been sponsored by the International Hydrographic Bureau (IHB) and is being prepared, according to uniform specifications, by the hydrographic services of 17 countries. Once the charts are produced any IHB nation member will be able to reproduce in facsimile form for its own use any of the charts in this series. This is a navigational series totally different from the GEBCO series and the GEBCO Plotting Sheets. This International (INT) series is made of nautical charts designed essentially for navigation. The coverage is limited to those oceans and seas where navigation takes place. This INT series is comprised of two sets of charts at small scales (1:10,000,000 and 1:3,500,000) plus a third set of medium scale charts covering the North Sea. By the end of 1973 some 15 charts had been published with the bulk of the charts being scheduled for publication by late 1974 or early 1975. The series is scheduled for completion by 1980. For the U.S. and, as in the case of the GEBCO series, the Pacific Ocean area assigned to the United States is split in two. The waters North of parallel 29° N are the responsibility of the National Ocean Survey (formerly U.S. Coast and Geodetic Survey). The waters South of parallel 29° N and all the Atlantic Ocean and Gulf of Mexico waters are the responsibility of the Hydrographic Center, Defense Mapping Agency. A list with the addresses of the hydrographic services or their authorized agents for the 17 countries responsible for the preparation of this INT series is attached at the end of this article.

In addition to the above mentioned series it is worth mentioning that ever since the early 1960s, one of the top priorities for the hydrographic services of the American and Russian navies has been the production of the "Bottom Contour Charts" on a world wide coverage. An American and a Soviet nuclear submarine that sunk a few years ago were both later reported to have been engaged in a crash program of accurate mapping of the ocean floor. These charts try to portray as accurately as possible the bottom contours of the various oceans and seas of the world and one of their primary purposes is in connection with global submarine warfare. A few of the earlier charts of this type produced by the hydrographic service of the U.S. Navy have been declassified and are being published. They are listed in the current catalog of charts of the Hydrographic Center, Defense Mapping Agency. However, both in the U.S. as well as in the U.S.S.R., the more recent and detailed charts of this kind are considered as highly classified defense materials. Library users connected with defense projects, having a high level of security clearance and operating on the "need to know basis", should be made aware of this additional source of bathymetric data.

As a useful complement to the preceding, the author offers the information contained in a letter received from the British Admiralty's Hydrographic Office. This letter answers a number of questions we had concerning the prefix and numbering systems used on British Admiralty charts. The pertinent information is as follows:

1. Most UK Admiralty charts are not prefixed, the numbers 1-4999 being reserved for standard marine navigational charts and numbers 5000-5999 for charts carrying navigational information which is widely used by navigators (e.g. tidal charts, routing charts, magnetic charts).
2. Some of the charts in the unprefixed series 1-5999 above are available in a second version with additional information overprinted. In these instances the following prefixes are added to the numbers of the basic charts:

L signifies a Consol version. [Consol - a long-range radio aid to navigation, the emissions of which, by means of their radio frequency modulation characteristics, enable bearings to be determined.]

(There is one complication: a few basic charts have been withdrawn or superseded but their Consol versions have been retained. There is also one exception: L240 is a Loran version of Admiralty chart No. 240)

L(D1) signifies a Decca version. [Decca - a trade name for a radio phase-comparison system which uses a master and slave stations to establish a hyperbolic lattice and provide accurate position-fixing facilities.]

The number following the bracketed letter D indicates the number of the particular Decca Chain overprinted. A few Decca versions have the additional prefixes (MC) and (IC). Multi Chain (MC) indicates that a chart, usually a small scale chart, carries two or more separate lattice systems covering two or more areas of the chart. Interchain (IC) indicates that a chart which is situated at the overlap of two lattice systems superimposes lattices from both systems.

INT signifies an International chart. UK printings of International charts carry two numbers, for example 4701 (INT 701). The number in parentheses is the internationally agreed number; the number which precedes it is the number assigned by this Department to INT charts edited and printed in this country.

S signifies a version of a chart showing swept routes through wartime minefields.

3. Charts specially prepared for particular purposes and which are not overprinted versions of navigational charts carry the following prefixes:

B Meteorological charts
C Oceanographical charts
D Miscellaneous navigational charts and diagrams
L Loran charts (with the exception of chart L240 noted above, all Loran charts have numbers in the 5000 series)
Q Wall charts, outline charts, operational charts

Most charts in the series listed above have numbers in the 6000 series but there are some exceptions, particularly in the B and L series.
LIST OF THE HYDROGRAPHIC SERVICES OR THEIR AUTHORIZED AGENTS FOR THE 19 COUNTRIES RESPONSIBLE FOR THE PREPARATION OF THE SERIES OF GEBCO PLOTTING SHEETS:

ARGENTINA
Casa Fuentes
Calle Montevideo 660
Buenos Aires

AUSTRALIA
Royal Australian Navy Hydrographic Service
Garden Island
New South Wales 2000

BRAZIL
Directoría de Hidrografia e Navegação
Ministerio de Marinha
Ilha Fiscal
Rio de Janeiro, GB

CANADA
Canadian Hydrographic Service
Marine Sciences Branch
Department of Energy, Mines and Resources
615 Booth Street
Ottawa 4

CHILE
Edgardo Mackay
Av. Errazuriz 471
Valparaiso

FRANCE
Service Hydrographique de la Marine
13, Rue de l'Université
75 – Paris (7)

GERMANY
Deutsches Seekarten-Berichtigungsinstut
Bade and Hornig
Studdenhuk 10, Postfach 112045
2 Hamburg 11

INDIA
Naval Hydrographic Office
Post Box No. 75
Dehra Dun 1, (U.P.)

INDONESIA
Direktorat Hydrografi Angkatan Laut
(Dithidral)
Djalan Gumung Sahara 87
Kjakarta

JAPAN
NYK Line
3-2, Navunouchi 2 Chome
Chiyoda-ku, Tokyo 100

NETHERLANDS
Afdeling Hydrografie Von Het
Ministerie van Defensie (Marine)
171, Badhuisweg,
s’-Gravenhage

NEW ZEALAND
Hydrographic Branch
Royal New Zealand Navy
Navy Office
Ministry of Defense
P.O. Box 292, Wellington

PHILIPPINES
The Director
Kawanihan ng Pagsukat sa Baybayin at
Kalupaan
421, Barraca San Nicolas
Maynila D-405

SOUTH AFRICA
Mercer, Bach and Hickson
71 Dock Road
Cape Town

SWEDEN
Sjofartsverket
Sjokarteavdelningen
Sehlstedtsgatan, 9
102-50 Stockholm, 27

TURKEY
The Hydrographer
Seyir ve Hidrografi Dairiesi Baskanligi
Cubuklu
Istanbul
<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
</tr>
</thead>
</table>
| Argentina    | Casa Fuentes  
Calle Montevideo 660  
Buenos Aires                      |
| Australia    | Royal Australian Navy  
Hydrographic Service  
Garden Island  
New South Wales 2000               |
| Brazil       | Directoria de Hidrografía e Navegação  
Ministerio de Marinha  
Ilha Fiscal  
Rio de Janeiro, GB          |
| Canada       | Canadian Hydrographic Service  
Marine Sciences Branch  
Department of Energy, Mines and Resources |
| Japan        | NYK Line  
3-2, Navenouchi 2 Chome  
Chiyoda-ku,  
Tokyo 100                      |
| Chile        | Edgardo Mackay  
Av. Errazuriz 471  
Valparaíso                   |
| Denmark      | Kongelige Danske Søkort-Arkiv  
Esplanaden 19  
København K.               |
NEW ZEALAND
Hydrographic Branch
Royal New Zealand Navy
Navy Office
Ministry of Defense
P.O. Box 292
Wellington

NORWAY
Norges Sjøkartverks Kartsalg
Kongsgt. 32
Stavanger

SOUTH AFRICA
Mercer, Bach and Hickson
71 Dock Road
Cape Town

UNITED KINGDOM
J. D. Potter, Ltd.
145 Minories
London EC3N 1NH

UNITED STATES
United States Department of Commerce
National Ocean Survey
Rockville, MD 20852

Director
Defense Mapping Agency
Hydrographic Center
Washington, D.C. 20390
ATTN: Chief, Bathymetric/Geodetic Div.

FOOTNOTES
(1) Originally produced as part of a series of technical reports prepared by the UCLA Map Library and intended mostly for distribution among the various map libraries of the University of California system.

(2) As stated to the author by Rear Admiral Allen L. Powell, Director, National Ocean Survey, the decision to use the "American" system of indexing GECPO plotting sheets was predicated on the very practical consideration that the then U.S. Navy Hydrographic Office (the designated United States lead agency for the GECPO project) had previously established their own world plotting sheet index and had compiled all their bathymetric information to them. Furthermore, this sheet layout of uniform 10-degree longitude bands, for the most active areas of the world's oceans, was better fitted to the final GECPO 1:10,000,000 scale bathymetric charts, produced at a uniform east-west extent of 90 degrees longitude.

(3) Two articles describing the origins, scope and aims of this INT series are:


A complete list of the INT charts, listing their title, limits and scale, number, producing agency and date of publication appears in the International Hydrographic Bulletin, April 1973, pp. 116-121.
Maps Are Not For Folding

Life is composed of a balance of successes and failures.
I happen to get my kicks out of success, and because of this, I try to stay away from folding maps as much as possible.
Once I spread one out, I become edgy, like a race horse smelling smoke in the barn.
Even though lost, I know my main problem will not be in finding my way.
My main problem will be folding the satanic map up again.
Without uttering words never taught to me by my mother.

Of course, it is embarrassing enough just getting lost.
Which I often do going from bedroom to bathroom. This is one of the better arguments I have for staying in bed.
As we all know, road and street maps do not fold logically.
Their creases offer no clues; they are merely frustration lines.
Try to follow logical folds and you end up with a paper airplane or sometimes a dunce's hat.
Airplanes and dunce hats do not fit in glove compartments.
I have a cousin who once opened a map of Fresno County in his Volkswagen and couldn't get it refolded.
It crowded him clean out of the car and he had to get out and walk.
In order to use the car again he called the AAA who sent out a map folding specialist who happen to have taken a night school course on refolding that particular map.

I met a man once who might have been a general were it not that he failed to pass map folding at West Point.
"Ridiculous," I said.
"I thought so too," he said, "until it was explained to me that several important engagements were lost during World War II due to nervous breakdowns of high officers attempting to refold secret war maps in the heat of battle.
"One raving general was wheeled into a field hospital still clutching a map which he kept refolding into the shape of his mistress."

So the question naturally arises - who folds these maps?
I have an acquaintance high in the firm which produces state road maps for service stations.
Maps that have ruined more dispositions than sour stomachs.
I called him and asked who works out the original folds in their maps.
"Funny you should ask," he said. "We don't have to hire anyone."
"How's that?"
"We are always swamped with volunteers," he said. "People seem to have common characteristics - one guy is paying alimony to two wives. There are three politicians who were badly defeated in the last election, and five have gout -- I just don't understand it."
"I can," I said.
Minutes
Western Association of Map Libraries
Biannual Meeting, May 10, 11, 1974
California State University at Fresno

The meeting was called to order by President Bea Lukens at 1:30 p.m.,
Friday May 10. Host Herb Fox introduced Dr. Henry M. Madden, University Lib-
rarian, who welcomed WAML to Fresno and outlined the plans for the new library
building. Ms. Lukens then introduced the Executive Committee members and then
quickly polled the members present for the States they represented (1 Arizona,
1 Idaho, 3 Oregon, rest California) before turning the meeting back to Mr. Fox,
who passed out sketch maps to facilitate the evening's endeavors and settled
the room-shortage in Fresno which occurred due to the presence of the West
Coast Relays. After pointing out the location of the duplicate/trade map table
and reminding participants to turn a copy of presented papers to Stan Stevens,
Ms. Lukens introduced the first speaker, Mr. Fox, who described the development
of the CSUF Map Collection. John Jewell, Science-Technology Librarian at Fresno
County Library, followed with a talk on "Establishing Liaison with Fresno's
Local Map Agencies."

At 2:25 pm, Ms. Lukens called the Business Meeting to order and asked for
additions or corrections to the Minutes of the last meeting, as printed in the
March 1974 WAML Information Bulletin. The Minutes were approved as published.
She then called on Stan Stevens to give the Treasurer's report. He reported a
healthy financial picture and stated that the full report will appear in the
November issue of the Information Bulletin, Volume Six, Number One. Ms. Lukens
then announced the three members of the Publications Advisory Committee (PAC),
Ed Thatcher, Mary Schell, and John Petros, and then gave the Nominations Commit-
tee report, which is as follows: President for 1974/75: Gail Neddermeyer;
President-Elect: Mary Larsgaard; Secretary: Phil Hoehn; Treasurer: Stan Stevens.
Ms. Lukens asked for further nominations. As there were none forthcoming Ms.
Neddermeyer moved to close the nominations, seconded by Mr. Stevens. The motion
passed unanimously. The nominees were thereupon elected by acclamation.
Mr. Thatcher then gave a report on the remote sensing sessions he attended at
the national AAG meetings in Seattle. As a final bit of business, Ms. Lukens
asked members to think about a location for the next meeting, so it could be
discussed when the business meeting reopened the next day.

After a coffee break, Mr. Fox introduced Dr. Michael Biechler, Assistant
Professor of Geography, CSUF, who spoke on "Guatemalan Coffee Culture: Loca-
tion and Movement". Ms. Lukens then asked those present to introduce themselves,
and then turned the floor over to Mr. Fox in an effort to insure coordination
of the evening's activities. As there was no further discussion, the meeting
adjourned at 5:05 pm so members could retire to the Fox's home for wine and
gemütlichkeit before supper at the Yturri Basque Hotel.

On Saturday, May 11, 9:05 am, Mr. Lukens called the meeting to order and
introduced Sandra Lamprecht, Geography and Map Librarian, CSU Long Beach, who
spoke on "Periodical and Bibliographic Sources for Geography Book and Atlas
Selection". This was followed by a coffee break [dish-water, according to
Dr. Biechler's definition], after which Dr. Paul Vander Meer, Department of
Geography, CSUF, spoke on "Cadastral Maps: Tools for Agricultural Development
in Taiwan". By popular consensus he extended the time allotted to discuss fur-
ther ramifications of the new land-holding consolidation movement.
At 11:15 am, Ms. Lukens reopened the Business Meeting. After a short discussion and vote, it was decided the fall meeting would be held in San Francisco on October 24th and 25th. Mr. Stevens brought up the possibility of a joint meeting with SLA in Denver in 1976, and Mr. Schacht volunteered Corvallis, Oregon for the Fall 1975 meeting. John Petros, host for the San Francisco meeting, then asked that all ideas and suggestions for papers and tours in S.F. be sent to him, and Maryly Burks mentioned it might be a good idea to have the Berkeley Documentation Center present information about their services. The next item was the possible compilation of a Union List of Atlases held by WAML members. After much debate it was held in limbo; Ms. Lukens asked Ms. Trevitt to draw up a proposal to be presented at the S.F. meeting. Ms. Woodruff, Mr. Petros, Mr. Stevens, Mr. Hoehn and Mr. Thatcher engaged in an involved dialogue about Occasional Paper #2, which ended with the recommendations that suggestions be submitted to the PAC, whence to the Executive Committee for review. Mr. Hoehn asked if the Sanborn Union List was defunct, and Mr. Stevens replied it was dormant as there was no coordinator to follow up on the compilation. Ms. Woodruff tentatively volunteered. Mr. Thatcher asked that a leader be appointed among the members of the PAC; it was moved, seconded, and unanimously passed that they choose their own chairperson. Mr. Stevens requested that all members receiving the Information Bulletin feel free to submit all suggestions or complaints about the content, frequency or whatever to the PAC. Bob Kreiger, California State Highway Department, reminded everyone that the California State Tourism Division was back in business and passed out sample maps [see "New Mapping of Western North America" for information]. The meeting was adjourned at noon, with a tour of Herb Fox's map collection to follow.

Sue Trevitt
WAML Secretary

<table>
<thead>
<tr>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUESTS</td>
</tr>
<tr>
<td>Gladys Krohn</td>
</tr>
<tr>
<td>Dr. Michael Biechler</td>
</tr>
<tr>
<td>Dr. Henry Madden</td>
</tr>
<tr>
<td>Dr. Paul Vander Meer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CALIFORNIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARIZONA</td>
</tr>
<tr>
<td>George Ilinsky</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CALIFORNIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryly Burks</td>
</tr>
<tr>
<td>Dianne Catlin</td>
</tr>
<tr>
<td>Wesley Catlin</td>
</tr>
<tr>
<td>John Petros</td>
</tr>
<tr>
<td>Herbert Fox</td>
</tr>
<tr>
<td>Phil Hoehn</td>
</tr>
<tr>
<td>William S. Hunt</td>
</tr>
<tr>
<td>John Jewell</td>
</tr>
<tr>
<td>C. R. Kreiger</td>
</tr>
<tr>
<td>Sandra Lammrecht</td>
</tr>
<tr>
<td>Beatrice Lukens</td>
</tr>
<tr>
<td>Dave Lundquist</td>
</tr>
<tr>
<td>Paul R. Martinez Perry</td>
</tr>
<tr>
<td>Dorothy Mewshaw</td>
</tr>
</tbody>
</table>
[Attendance, Biannual Meeting, Fresno, May 10-11, 1974, continued:]

[CALIFORNIA (Continued):]

Gail Neddermeyer
Mary Scholz
Stanley Stevens
Evelyn Woodruff

University of California, Berkeley
University of Santa Clara
University of Calif., Santa Cruz
San Jose State University

OREGON

Dave Schacht
Ed Thatcher
Sue Trevitt

Oregon State University
University of Oregon
University of Oregon

IDAHO

Lily Wai

University of Idaho

PROGRAM

Friday, May 10, 1974

Description of Map Collection, University Library, California State University at Fresno -- by Herbert Fox, Map Librarian, CSUF

Establishing Liaison with Fresno's Local Map Agencies -- by John Jewell, Fresno County Library

Business Meeting

Guatemalan Coffee Culture: Location and Movement -- by Dr. Michael Biechler, Assistant Professor of Geography, CSU, Fresno

Saturday, May 11, 1974

Periodical and Bibliographic Sources for Geography Book and Atlas Selection -- by Sandra J. Lampecht, Geography and Map Librarian, CSU, Long Beach

Cadastral Maps: Tools for Agricultural Development in Taiwan -- by Dr. Paul Vander Meer, Assistant Professor of Geography, CSU, Fresno

Final Business Meeting

Tour of Map Collection, University Library, CSU, Fresno

San Francisco in October .... 1974

The first meeting of the 1974/75 WAML year is scheduled for October 24th and 25th (Thursday and Friday) at the San Francisco Public Library, located at the Civic Center, Larkin and McAllister streets. John Petros, Head of Acquisitions, SFPL, is host. Program arrangements will be organized by Mary Larsgaard, WAML President-Elect, who may be reached at the Victor J. Bouillon Library, Central Washington State College, Ellensburg, WA 98926. The program will run from Thursday 9am to Friday noon.
OLD MAPS OF THE WORLD
CHARTS AND MAPS OF CALIFORNIA INTEREST
1375 - 1720 A.D.

Exhibited at
THE UNIVERSITY LIBRARY
CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

January 15 to March 31, 1974

By

COLLECTION FOR THE HISTORY OF CARTOGRAPHY
CALIFORNIA STATE UNIVERSITY, FULLERTON
For this exhibition two different groups of maps have been selected.

I - SEVEN WORLD AND OTHER EARLY MAPS AND CHARTS, ca.1375-1605.

The cornerstone of this exhibition, (exhibit no. 1), is a little manuscript schematic map of the World, drawn nearly 650 years ago, on one of two vellum fragments found in a bookbinding. It is accompanied with a special study by Mr. George H. Beans, Tall Tree Library, Jenkintown.

Exhibit no. 2 is a small woodcut nautical chart, ca.1477, from the earliest atlas of the Mediterranean Sea, and is of an island, Skyros, in the Aegean Sea, an area then most important.

Claudius Ptolemaeus was an astronomer, mathematician and geographer of Alexandria in the second century A.D. His greatest work is his Geography, translated and published in many editions. The first printed maps, produced in the fifteenth century, were largely based on the tradition inherited from Ptolemy's manuscript.

The woodcut of the British Isles, (exhibit no.3), is from the second Ulm edition, 1496, of the Geographia, and is on Ptolemy's first projection. The maps of the World, 1574, (exhibit no. 8), and 1605, (exhibit no. 13), are in later editions, and are on his second or modified conic projection. The 1605 map is in contemporary coloring.

The beautiful map of the World by Orance Finé, 1540, (exhibit no. 4), is in the form of a double human heart, and the little map of Honiter, 1546, (exhibit no. 5), is cordiform or heart shaped.

II - TWENTY MAPS AND CHARTS OF CALIFORNIA INTEREST, 1550-1720.

These maps, mostly of America and the Pacific Ocean, are not only of interest as the work of different cartographers in the 15th, 16th and 17th centuries, but also show how California was represented during this period.

On early maps, California was represented as a peninsula, although on Münster's quaint map, (exhibit no. 6), the western coast runs straight north and south without either peninsula or island.

From ca.1622 and for a hundred fifty years, maps were issued with California insular, although there were also maps with it as a peninsula.

The name "California" originated 1510 in a romance written by Garci Rodriguez de Montalvo. The romance in the name "California" and
its representation as a fabulous island, which in many maps of great rarity and artistic beauty, has added enjoyment, even to the serious scholar, in the study of its cartography.

The island was delineated differently by various cartographers; the type of configuration of the island is noted in the description of the respective exhibits.

Twenty-five maps with California as an island are reproduced in California as an Island; an Illustrated Essay, by John Leighly, published by The Book Club of California, San Francisco (1972). Five of the maps here exhibited (exhibits nos. 18, 20, 22, 23, 24 and 25) were reproduced in this work.

R.V.B.

(continued from p. 5).
Sept. Paris: N[icolas] de Fer, 1720. This is Fer's second edition of Kino's 1695-96 map; it is more artistic and closer to Kino's original than Fer's first edition in 1705. Fer's maps are the only ones influenced directly by Kino; they in turn exerted a European-wide effect on the cartography of the area.
EXHIBITS

ca.1375. [Anonymous]. A manuscript world map on vellum. The World is shown as a disc surrounded by the Ocean Sea and the names of the Winds. The east is at the top and the disc is divided into three main segments representing the continents of Asia, Africa and Europe. Maps of this type are referred to as "T-O" type, because their basic lines suggest these two letters when the map is viewed with the east at the top.

ca.1477. [Bartolomeo da li Sonneti. Skyros. Venice ca.1477]. A woodcut, hand colored, with legends in manuscript. From his Isolario, the earliest atlas of the Mediterranean. Skyros is an island in the Aegean Sea. Nordenskiöld states that these maps are the first printed maps of which it is expressly stated that they are founded on actual measurements.

1486. [Claudius Ptolemaeus]. Prima Europa Tabula. [British Isles]. From the Cosmographia, Ulm, 1486. A woodcut, printed from the same block as the first Ulm edition of 1482.

1540. Orance Finé. Nova, et Integra Universi Orbis Descriptio. This map was constructed by Finé in Paris in 1531, at the cost of Christian Wechel, a Swiss publisher in Paris. In 1540 Wechel deleted the address to the reader, which is in the block at the bottom center, substituted his own name for Finé's, and inserted a new address, translated, "We have engraved, studious reader, this true and complete description of the entire world according to the best geographers and hydrographers, which, in imitation of a double human heart is exhibited on a plane as exactly as possible for a spherical body. The left heart represents in a just proportion the northern shores, the right one, the southern shores. At the Basle escutcheon, 1540"-- Harrisse. This map was copied by Mercator for one of his early maps.

1546. [Johannes Hontor]. Universalis Cosmographia. Tigrri [Zurich], 1546. In Rvdimentorvm Cosmographicorum Ioan Honteri Coronensis libri III. [Zurich], 1573. A small atlas follows the text, which consists of this cordiform mappamundi and 12 maps in the Ptolemaic style. The name America is inscribed.

1550. [Sebastian Münster]. Novus Orbis. Die Nüw Welt. [Basle, 1550]. Münster's first map, its origin dating between 1534 and 1540. A woodcut and one of the quaintest maps of the sixteenth century. The Portuguese standard is off the coast of Africa and the Spanish standard in the West Indies, reflecting the 1493 Papal line of Demarcation settling discovery claims. Münster was the first to introduce a separate map for each of the four then known continents, viz: Europe, Asia, Africa and America.
1570. [Abraham Ortelius]. Americae sive Novi Orbis, Nova Descriptio. [Antwerp], 1570. California is delineated as a peninsula.


1587. Ab[raham] Ortelius. Americae sive Novi Orbis, Nova Descriptio. [Antwerp], 1587. A revision, with important changes, of the 1570 map, number seven in this exhibition. The excrescence of the coast of Chili has disappeared.

1589. Abraham Ortelius. Maris Pacifici, (Quod vulgo Mar del Zur) cum regionibus circumiacentibus . . . [Antwerp], 1589. A famous map important to the development of the cartography of the Pacific. California is depicted as a peninsula with the legend "Cali-formia." This is probably the earliest appearance in print of the turtle-shaped configuration of the Japanese Islands.

1595. Gerard Mercator. America sive India Nova ad magnae Gerardi Mercatoris qui Universalis imitationem in compendium redacta. Duisburg, [1595]. As the title states, this map was taken from Mercator's famous map of the World, of 1569, which was constructed on the projection, which ever since has been called "Mercator's Projection."

1596. Théodore de Bry. America sive Novvs Orbis Respectv Europaeorvm inferiori Globi Terrestris Pars. Francofurti ad Moenum [Frankfort-on-the-Main], 1596. From, Collectiones Peregrinationum, the celebrated collection of voyages published by the De Bry family.


1606. Jodocus Hondius. America. Amsterodami [Amsterdam, 1606]. The first general map of America by Hondius which gives North and South America their respective names.

1616. Petrus Bertius. Carte de l'Ameriqve corrigée, et augmentée dessus toutes les autres cy devant faictes. [Amsterdam, 1616]. Bertius was cosmographer to Louis XIII.

1618. Petrus Bertius. Novveau Mexique et Californie. [Amsterdam, ca. 1618]. From one of the many books published in Amsterdam in which the plates of Bertius were used. (see illustration).

1630. Guiljelmo Blaeu, [Willem Jansoon Blaeu]. Americae Nova Tabula. [Amsterdam, 1630]. Blaeu's work is esteemed as the highest expression of Dutsch cartography during the period of its supremacy.
1640. [Henricus Hondius]. America Septentrionalis. Amstelodami Exeedit Ioannes Ianssonius. [Amsterdam: Jan Jansson, 1640]. California is an island in the Briggs configuration. Jansson was a son-in-law of Hondius.


1650. [Jan Jansson]. Mar del Zvr Hispanis Mare Pacificum. [Amsterdam, 1650]. California is delineated as an island with a flat northern coastline.

1650. [Frederik del Wit]. Nova Totius Americae Descriptio. [Amsterdam], 1660. California is an island in Sanson's second configuration of 1656. De Wit became one of the most famous engravers of maps of the second half of the seventeenth century.

1670. [Nicolas] Visscher. Novissima et Accuratissima Totius Americae Descriptio. [Amsterdam, ca. 1670]. California is an island with a flat northern coast. An important map that was copied many times.

1680. [Claes Jansoon Vooght]. Pascaert vande Zuyd Zee en een gedeelte van Brasil van Ilhas de Ladronos tot R. de la Plata. t'Amsterdam Ey Joannes van Keulen . . . [1680]. A sea chart of the Pacific Ocean with California as an island in the second Sanson configuration of 1656.

1690. [Vincenzo Maria] Coronelli. America Setentrionale, Mar del Svd, detto altrmente Mare Pacifico. Venice, ca. 1690. Shows the route of Jacques Le Maire in 1615-17. California is an island in the second Nicolas Sanson configuration of 1656. Coronelli, a Franciscan friar, was cosmographer to the Republic of Venice and founder in 1680 of the first geographical society, Academia Cosmografica degli Argonauti.

1700. Caroli [Carell] Allard. Recentissima Novi Orbis sive Americae Septentrionalis et Meridionalis Tabula. [Amsterdam, ca. 1700]. California is shown as an island in the Guillaume Sanson configuration. Allard's work is among the rarest of the major Dutch cartographers.

1708. [Guillaume] de L'Isle. L'Amerique Septentrionale. Dressée sur les Observations de Mr. de l'Academie Royale des Sciences, & quelques autres, & sur les Memoires les plus recens. Paris: Chêz l'Auteur . . . 1700 [i.e. 1708]. The routes of different voyagers are shown: Cortés, 1534; Gaetano, 1542; Mendana, Drake and Noort. Delisle apparently uncertain as to whether California was an island or a peninsula, did not quite close the upper end of the Gulf of California.

THE ENVIRONMENTAL REMOTE SENSING APPLICATIONS LABORATORY,
OREGON STATE UNIVERSITY

by
David W. Schacht
Map Librarian

and

Barry J. Schrumpf
Director
Environmental Remote Sensing Applications Laboratory

In November 1971, the U.S. National Aeronautics and Space Administration approached Dr. Charles E. Poulton of the Rangeland Resources Program at Oregon State University about the proposed establishment of a remote sensing laboratory on campus to transfer satellite data and resultant technology from scientists at the University to potential users of this technology and to help interested persons use some sophisticated forms of remote sensing techniques. The proposal was approved and funded on April 1, 1972, and six months later the Environmental Remote Sensing Applications Laboratory (ERSAL) was established in Wittycombe Hall with Dr. Poulton as Director. The facility is currently directed by Barry Schrumpf, research assistant in Rangeland Resources.

Applications

The laboratory was funded "largely because of involvement of the staff of the Rangeland Resources Program at Oregon State University in developing techniques of ecological resource inventory and analysis through remote sensing." (Biblio cite 1, appendix A, p. 1). Its primary purpose is to help Oregon solve its environment, resource, and human-related problems.

The schools and divisions at the University currently involved in remote sensing applications include the Oregon Agricultural Experiment Station and School of Agriculture, Forest Research Laboratory and School of Forestry, School of Engineering and Engineering Experiment Station, School of Science, School of Oceanography, Federal Cooperative Extension Service, and the Computer Center. The areas of research are resource inventory, land use planning, resource allocation and management, oceanography, and pollution monitoring.

The satellite technology is being or has been used by many neighborhood public agencies, including comprehensive land use planning groups, city and county planning commissions, and some councils of government. The information is also being used by the Oregon Coastal Conservation and Development Commission (OCCDC), Oregon State Forestry Department, Oregon State Engineer's Office, Oregon State Department of Geology and Mineral Industries, U.S. Army Corps of Engineers, U.S. Forest Service, and the U.S. Geological Survey.

ERTS-1

The first Earth Resources Technology Satellite (ERTS-1) was successfully launched on July 23, 1972. It circles the earth every 103 minutes, 16 seconds and is sun-synchronous; that is, it traverses the same point once every 18 days at exactly the same time. It passes over Oregon 7 days out of every 18-day cycle in a polar orbit (approximately north-south) at an altitude of 560 miles,
circling the earth 14 times per day and imaging the entire state in 7 successive days in 7 flight lines. Coverage of adjacent orbital tracks is separated by 24 hours.

Figure 1 is a map showing the ground traces, photocenters, and related information for 7 successive daily satellite passes over Oregon. For each 7-day period a second map is prepared like the one in Figure 2, showing the cloud cover for each scene.

Sidelap of the photographs is 10% at the equator, gradually increasing poleward with about 40-45% sidelap in Oregon. The cameras can resolve a piece of ground as small as one acre. A single exposure, or scene, covers an area approximately 185 km$^2$ in size. Oregon is covered by 24 such scenes.

"The satellite employs a 4-channel, multispectral scanner system. It images exactly the same area of the earth simultaneously by recording the reflected energy received ... in the visible green, visible red, and two invisible, near or reflected infra-red bands. This record is subsequently converted into a black and white photographic image, and selected frames are converted to computer compatible, digital tape for sophisticated analysis." (1, p.3). The resulting photographs can be interpreted by standard techniques, or false color prints of any combination of bands can be produced in a color additive process. The latter are subject to conventional interpretation methods with various mechanical-electronic devices.

The satellite's sensors respond only to sunlight; hence, its detectors do not receive data from the dark side of the earth. Its tape recorder memory is no longer operative, so it can collect data only when direct transmission to ground receiving stations is possible, i.e., only over North America.

**U2 Photography**

ERSAL is also receiving imagery flown by NASA's U2 aircraft from altitudes of 60,000 to 65,000 feet using black and white, color, and color-infra-red photography.

**Image Processing**

Images of western United States from ERTS-1 are received at Goldstone, California, from where they are relayed to the Goddard Space Flight Center at Greenbelt, Maryland. Here the information is processed and the photographs compiled and distributed to the various projects supported by NASA. The same kind of information is also available on magnetic tape.

Satellite data and NASA aircraft imagery can also be purchased from the Earth Resources Observation Systems Data Center (EROS Data Center) at Sioux Falls, South Dakota, which is a central repository where remote-sensor data are received and processed. The center "provides professional and instrumental assistance to government and private users of the data and serves to further the work of resources and environmental scientists throughout the world." (3, p. 2).

Some 600 ERTS projects are funded through the Goddard Space Flight Center. These include about 20 university laboratories in the United States. Some projects have also been established in and are supported by foreign countries.
At Oregon State University ERSAL has a standing order with the Goddard Space Flight Center for all imagery of Oregon with less than 50% cloud cover. There is an interval of about five weeks between satellite imaging and delivery to the University. The Laboratory here has a microfilm library of ERTS coverage of the entire earth. Selected digital tapes have also been obtained for study of special problem areas in Oregon, such as the tussock moth infested forests. Processing of the tapes is accomplished in the Department of Electrical and Computer Engineering and in the Computer Center Laboratory.

Two ERTS research projects are currently underway at Oregon State University. One, directed by Dr. Gerald H. Simonson in the Soil Science Department, is a multidisciplinary effort involving the departments of Soils, Forestry, Range Lands Resources, Geology, Electrical and Computer Engineering, and the Computer Center. The research consists of using ERTS data in resource inventory and land use planning in the Crook County area of central Oregon. The county boundaries correspond almost exactly to those of the Crooked River watershed.

One of the objectives of the Crooked River Project is to gain an overall picture from satellite observations of the vegetation, soils, landforms, geology, and water resources as a base for land-use planning and resource allocation. From information thus acquired, detailed studies of these resources in specific areas can be conducted from larger scale photography. Another goal of the program is to involve county government planners, state and federal professionals, and interested citizens in the analysis and solution of problems identified through photographic interpretation. Officials and citizens in adjoining Deschutes and Jefferson Counties will be encouraged to similarly solve their resource allocation problems when NASA provides coverage for those areas.

The second ERTS project at Oregon State University is directed by Barry Schrumpf of ERSAL and is a study of methods for vegetation inventory in the arid environment of southern Arizona.

Figure 3 is a mosaic of the state of Oregon laid by ERSAL personnel from 24 scenes of ERTS-1 data.

**Library and Film Archives**

The library at the Environmental Remote Sensing Applications Laboratory on campus has a NASA catalog of all available ERTS imagery on 16mm microfilm. There is also a small collection of Earth Resources Photography from Gemini IV and Apollo VI, VII, and IX missions, as well as considerable NASA aircraft photography from the initial test sites in the Southwest.

The report file includes copies of aircraft flight and mission reports containing essential information on camera-film-filter and other imaging systems, flight parameters, and a flight track for all NASA imagery over Oregon. Special reports and references relate to new remote sensing technology, and there is a current file of new NASA research reports covering Earth Resources Applications.

**Bibliography:**
Figure 1. KEY TO ERTS COVERAGE FOR
THE STATE OF OREGON

Showing ground traces and their designators, photocenter symbolization and frame names.

Prepared by the Environmental Remote Sensing Applications Laboratory
Figure 2. ERTS COVERAGE FOR THE STATE OF OREGON

PERIOD OF: MAY 26-JUNE 2, 1973

CLOUD COVER SYMBOLIZATION
- virtually cloud free
- scattered cloud coverage
- nearly complete cloud cover

Prepared by the Environmental Remote Sensing Applications Laboratory.
ARIZONA

Glendale Chamber of Commerce. [Map of] Glendale, Arizona. 1:20,000. 197.-. Glendale Chamber of Commerce, 7125 No. 58th Drive, Glendale, AZ 85301

Mesa Chamber of Commerce. Street Map, Mesa, Arizona. approx. 1:20,000. 1973. Mesa Chamber of Commerce, 10 W. 1st St., Mesa, AZ 85201

Scottsdale Chamber of Commerce. [Map of] City of Scottsdale, Arizona. 1:12,000. 197-. Scottsdale Chamber of Commerce, 7064 Main Street, Scottsdale, AZ 85251


[Yuma] First National Bank of Arizona. Street Map of Yuma. 1:20,000. 197-. Distributed by Yuma County Chamber of Commerce, P.O. Box 230, Yuma, AZ 85364

ALBERTA


BRITISH COLUMBIA


CALIFORNIA

California. Division of Tourism and Visitor Services. California: the World within a State: official California tourism map. by The H. M. Gousha Co. 1:1,267,200. 1972. Shaded relief. Highways emphasis of main map, verso has insets of urban areas' highways, and tourist information. California Division of Tourism and Visitor Services, 1400 Tenth Street, Sacramento, CA 95814

California. Division of Highways. California State Highway Map, 1974. 1:1,000,000. Shows Freeway and Expressway System, planning and construction progress. Verso has insets of urban area, map of State showing AMTRAK system. California Division of Highways, P.O. Box 1499, Sacramento, CA 95807


California. Division of Mines and Geology. Environmental Geological Analysis of the South County Study Area, Santa Clara County, California. 1973. [its Preliminary Report #18] Two maps with text: "Relative Geologic Stability" @ 1:24,000; and "Areal Geology" @ 1:24,000. by John W. Williams, et al.

La Mesa Chamber of Commerce, and the City of La Mesa, California. Street map of City of La Mesa and Vicinity. Corrected to January 1974. 1:19,000. La Mesa Chamber of Commerce, P.O. Box 235, La Mesa, CA 92041

San Diego Transit Corp. San Diego Transit Routes [shows bus service to metropolitan area]. [Route "O" offers a 25¢ fare from San Diego to Tijuana, Mexico; verso describes each Route and all transfer points.] 197-. San Diego Transit Corp., P.O. Box 2511, San Diego, CA 92112.

San Leandro Chamber of Commerce. San Leandro and vicinity 1974 Map. Map copyright by Barclay Maps, San Jose. 1:24,000. 1974. San Leandro Chamber of Commerce, 262 Davis Street, P.O. Box 607, San Leandro, CA 94577


MEXICO

Gastil, Gordon, Richard P. Phillips, and Edwin C. Allison. Reconnaissance Geologic Map of the State of Baja California. 1:250,000. Multi-colored. The map set consists of three sheets, each approx. 36" x 48" with legends in both English and Spanish. The geographic base shows roads, towns, mines, ranches, drainage, springs, and mineral prospects. The road base is probably the most comprehensive ever published. Prices: $7.50 folded in 9" x 12" envelope; $10.00 rolled in mailing tube. Prices to members of GSA: $6.00 folded, $8.00 rolled in tube. Order from: San Diego State University Press, 5402 College Avenue, San Diego, CA 92115. (Calif. orders add tax.)

Gifts & Exchange

Maureen Wilson, Map Librarian at University of British Columbia, has kindly offered the following duplicate maps:

U.S. Department of Agriculture.

8 v. maps (part col) 48 x 36 cm. [see Entry 10455, LeGear, for Contents.]

"If anyone would like them we have a complete set and a few duplicates. The person to contact is Graham Elliston, Gifts and Exchange Division, The Library, University of British Columbia, 2075 Wesbrook Cres., Vancouver, B.C. V6T 1W5"
Mai Treude, Map Librarian, and her Assistant, Patricia Moore, Map Division, Wilson Library, University of Minnesota, have been kind to furnish the following details from the April 1974 issue of their Current Announcements and Selected New Acquisitions:

**Air photos offered.** Photos of various counties in the following states are available to interested institutions. Preference will be given to institutions with photos of Minnesota to exchange; otherwise recipients must assume postage. Coverage available is from the 1950’s, except for the Idaho group where one flight is from the 1930-40’s.

Contact Donald Osier, Gifts & Block Purchases Department, Wilson Library, University of Minnesota, Minneapolis, MN 55455.

<table>
<thead>
<tr>
<th>ARIZONA</th>
<th>IDAHO [continued]</th>
<th>UTAH</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUH Cochise</td>
<td>DHT Ada</td>
<td>CYO Tooele</td>
</tr>
<tr>
<td></td>
<td>DHV Canyon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DHW Franklin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>YQ Jerome</td>
<td>WASHINGTON</td>
</tr>
<tr>
<td></td>
<td>YR Twin Falls</td>
<td>AAS Klickitat</td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>MONTANA</td>
<td>AAV Columbia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COO Kanogan</td>
</tr>
<tr>
<td>AAW Glenn</td>
<td>AZR Hill</td>
<td>Other States available but not listed here:</td>
</tr>
<tr>
<td>AAX Butte</td>
<td>AZY Morton</td>
<td>ALABAMA</td>
</tr>
<tr>
<td>AAZ Sutter</td>
<td>CCL Big Horn</td>
<td>INDIANA</td>
</tr>
<tr>
<td>ABB Yolo</td>
<td>DWT Carbon</td>
<td>KANSAS</td>
</tr>
<tr>
<td>ABC Sacramento</td>
<td>DWU Golden Valley</td>
<td>MISSISSIPPI</td>
</tr>
<tr>
<td>ABE Stanislaus</td>
<td>DWY Wheatland</td>
<td>NEBRASKA</td>
</tr>
<tr>
<td>ABM Placer</td>
<td></td>
<td>OHIO</td>
</tr>
<tr>
<td>ABO Solano</td>
<td></td>
<td>OKLAHOMA</td>
</tr>
<tr>
<td>AXH San Luis Obispo</td>
<td></td>
<td>PENNSYLVANIA</td>
</tr>
<tr>
<td>CJA Santa Cruz</td>
<td></td>
<td>SOUTH CAROLINA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TEXAS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VIRGINIA</td>
</tr>
<tr>
<td>COLORADO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNX Powers</td>
<td>DYR Mineral</td>
<td></td>
</tr>
<tr>
<td>CWQ Alamosa</td>
<td>MY Fergus</td>
<td></td>
</tr>
<tr>
<td>CWG Costella</td>
<td>NO Sanders</td>
<td></td>
</tr>
<tr>
<td>CWX Rio Grande</td>
<td>NEVADA</td>
<td></td>
</tr>
<tr>
<td>CWU Saguache</td>
<td>EBA Nye</td>
<td></td>
</tr>
<tr>
<td>DLV Bent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DLW Crowley</td>
<td>NEW MEXICO</td>
<td></td>
</tr>
<tr>
<td>YB Weld</td>
<td>DED Eddy</td>
<td></td>
</tr>
<tr>
<td>YC Logan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YF Adams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YG Washington</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YH Arapaho</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDAHO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNS Bear Lake</td>
<td>DDFJ Benton</td>
<td></td>
</tr>
<tr>
<td>CVR Lincoln</td>
<td>DFK Clackama</td>
<td></td>
</tr>
<tr>
<td>CVS Owyhee</td>
<td>DFM Linn</td>
<td></td>
</tr>
<tr>
<td>CXP Caribou</td>
<td>DFN Marian</td>
<td></td>
</tr>
<tr>
<td>CKU Bannock</td>
<td>DFO Multnomah</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DFP Polk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DFOY Yarnhill</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DVP Union</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NZ Umatilla</td>
<td></td>
</tr>
</tbody>
</table>
Publications of Relevance,

INTERNATIONAL MAP CATALOG

Denoyer-Geppert Company of Chicago has reissued its catalog under the title given above, with a new number - FM 73-74. This is a reprint of the FM 71-73 catalog, no revisions being detected. The revisions occur in an accompanying "Price Changes for Catalog No. FM 71-73 and Catalog No. FM 73-74, Special Notice on price changes effective April 1, 1974".

For those map librarians that use Denoyer-Geppert as a supplier of classroom type maps and other products, it is essential that the Special Notice of Price Changes be used to update ordering information. Several entries that appear in catalog FM73-74 are listed in the Special Notice as being "Out of Print".

Denoyer-Geppert, 5235 Ravenswood Avenue, Chicago, Illinois 60640.

HISTORIC URBAN PLANS


Some of the new reproductions offered are: San Francisco 1878 by Currier and Ives; Portland 1858 by Kuchel & Dresel; and 31 other maps of U.S. and foreign cities.

L. S. Straight

Maps and Prints, Catalogue 269, and Americana, Catalogue 268, are two of the recent out-of-print map catalogues issued by L. S. Straight.

A typical offering from 269 reads as follows: "Item 11. COLORADO. A turn of the century county map, with all the railroads shown. The 1890 population is 412,198. Dozens of mountain peaks identified. Map of the Dakotas on verso. Printed in colors. 10x12 1/4. Springfield, 1899. $12.50".


GEOLOGICAL MAP SERVICE

Index 2 Revised to pages 141-175 (items 801 to Jall4) of the DETAILED MAP CATALOG of Telberg Book Corp., P.O. Drawer N, Sag Harbor, N.Y. 11963, has been issued by Val Telberg [a new Associate Member of WAML]. Telberg specializes in maps, atlases, and books, related to earth sciences. Translations of books and gazetteers from Slavic languages to English are also a distinction of Telberg's work. Offerings are stronger in the geologic material, but ethnic, land-use, economic and other specialized maps are available.

Postscript: Note on Page V of Index 2 indicates that Index 1 "covers pages 1-133 (items 1-300), and Index 3 (rev.) covers pages 176-200 (items Rll6-Be291)."
GUIDE TO BAJA

The Baja Book has been published by Baja Trail Publications, P.O. Box 15444, Santa Ana, California 92705. It is listed at $7.95 (Calif. residents add tax.)

CALIFORNIA CENSUS DATA

Western Economic Research Company of 13437 Ventura Blvd., Sherman Oaks, California 91403 has issued a Spring 1974 catalog of their maps and census tabulations.

The major metropolitan areas of California - San Francisco Bay Area, Los Angeles five-county area, and San Diego County - are depicted on maps to indicate population and economic data. A wide range of data, maps, and other products are available - the catalog is also a price list.

KARTENBRIEF

Geo Center, Stuttgart, Germany, has published Kartenbrief Number 263, the third issue for 1973 which is the German language catalog of "new maps, guides, atlases" available from this firm. Geo Center was created by the merger of Zumstein and Reise-und Verkehrsverlag. Geo Katalog '73 is the firm's standard map catalog [which replaced the Zumstein Katalog, and would be the 10th edition].

MEDICAL MAP

Saul Jarcho, M.D., Editor in Chief of the Bulletin of the New York Academy of Medicine, has written "An Early Medicostatistical Map (Malzaigne, 1940)" in the January 1974 issue [Second Series, vol. 50, no. 1, pp. 96-99]. The article describes a map of the incidence of hernia in France by Joseph-Francois Malzaigne. Dr. Jarcho states that no statistical map of disease had been produced prior to this one.

UNION CATALOG OF MAPS

The Union Catalog of Maps, Number 1, January-February 1974 is compiled by Robert W. Rountree and James A. Winkfield of the Berkeley Documentation Center [which is not connected with the University of California or with any other institution]. Published bi-monthly (with an annual cumulation), the subscription price is $25.00 per year. P.O. Box 361, Berkeley, CA 94701. A "Report Form" is inserted which enables subscribers to report to BDC their own holdings that can be included in the subsequent issues.

NEW STANFORD CATALOGUE

ISBN 0-85935-000-2

Kenneth Winch is principal cataloger of Edward Stanford, Ltd., London, and in a separate notice from him he states the following in regard to the Stanford Reference Catalogue [and its amendments, Bulletins, which have only numbered four since the main work was issued]: "We are sorry to have to bring to an end
the further production of our own reference catalogue which has been a very popular and useful guide to available mapping but the new publication in printed and bound form is more economical to produce and, we believe, will prove to be an even more effective cartographic reference guide."

Therefore, Stanford Reference Catalogue is no more; however, at this point there is no indication that the new work will be updated by annual editions.

**PLANNING A MAP LIBRARY**


It covers all aspects of planning and estimating space, it contains floor plans, photographs of typical laboratories for geography/cartography, and a section on map libraries. A bibliography and sources of information on equipment is appended. Emphasis is more on geography classroom and office space than about map libraries, but overall it is a very useful reference booklet.

**TREASURE MAPS**


**COMPUTER MAPPING**

The U.S. Bureau of the Census has published Census Use Study: GRIDS, A Computer Mapping System by Matthew A. Jarro. The Grid-Related Information Display System (known as GRIDS) was written by the Census Use Study staff to provide users with a flexible, easy-to-use computer mapping system that could be used by non-programers and programers alike. It will run on any computer system that has a suitable FORTRAN compiler and sufficient storage, regardless of computer word size or operating system.

The manual is divided into three sections and a series of appendixes: Section 1 is designed to be a self-teaching course in the usage of GRIDS. Section 2 is designed to be an installation manual for GRIDS. Section 3 is a comprehensive discussion of the program logic of GRIDS.


**UNION LIST**

AUSTRALIAN MAP CURATORS' CIRCLE


Contents: The Growth and Development of the Map Collection in the National Library of Australia, by Tom Knight.
The Qualifications of a Map Librarian, by Alan Bartlett.
Have we got the maps you want? Guides to the map user in finding the right maps for the job, by Ellis Thorpe.
Map Storage and Conservation, by Patricia Alonso
Map Terminology, by Max Poale
Problems of a University Map Library, by Dorothy Prescott
The Geography Department Map Library, by Jim Missen
The University Map Library, by Max Poale
The County and Parish Maps of New South Wales, by Con Davis
State Library Map Collections, by Patricia Alonso
Map Classification, by Dorothy Prescott
Map Classification, Indexing and Cataloguing, by Max Poale
Australian Maps, by Elizabeth Ellis
The Map Library of the Division of National Mapping, by Bert Hurren
Final Session - Resolutions made at the Map Keepers' Seminar and Workshop

It was at the Final Session that the resolution to create the Australian Map Curators' Circle was adopted. The second annual meeting of the group was to be held at Sydney.

CARTOMATIQUE

Cartomatique aims to gather on coded microfilms the "non-autonomous" maps that is to say those drawn from theses, periodicals and other geographical publications which are not easily accessible to users. The National Library of Canada jointly with Le Service d'analyse et d'indexation de la Bibliothèque de l'Université Laval offers such a geographical information retrieval service. Cartomatique is the name of that information system.

In 1972 the information system consisted of some 10,000 maps; this number increases every year at a rate of approximately 8/10,000. Maps from the following sources have been indexed: Laval University, BA, MA, Ph.D. theses in Geography; Laval University, MA, Ph.D. theses in forestry and geodesy; McGill University, MA, Ph.D. theses in Geography; Montreal University, MA, Ph.D. theses in Geography; and six geographical periodicals.

The Cartomatique classification scheme and the instructions manual to the optical selector are available to users. They would provide the necessary data for the query formulation.
SOFTWARE & DATA FILES

U.S. National Technical Information Service.


NTIS is a central source for the public sale of U.S. Government-sponsored research reports and other analyses prepared by Federal agencies, their contractors or grantees, and it is a central source for Federally generated machine-processable data files and programs.

NTIS sells at cost, paper copy or microform, to subscribers the full text of reports in categories of interest based on a custom profile selected by the subscriber. Individual reports are available. The catalog Software & Data Files named above has categories such as: Demography, Earth Sciences, Cartography, Environmental Pollution and Control, Library and Information Science, Transportation, etc. A sample of the entries is shown below:

Earth Sciences: Cartography

Magnetic Tape Containing Average Elevations of Topography in California and Adjacent Regions for Areas of 1x1 Minute and 3x3 Minutes in Size

Geological Survey, Menlo Park, California
S. L. Robbins, H. W. Oliver, and Donald Plouff,
Mar 73, 1 reel mag tape, USGS-GS-73-008-MT,
USGS-GD-73-009

Specify tape recording mode desired: 7 track 556 or 800 BPI, ODD parity or 9 track 800 BPI ODD parity. See also documentation, BP-219-795.

Average elevations of about 199,000 1x1 minute and 51,000 3x3 minute 'compartments' in California and vicinity are recorded on the magnetic tape. The 1x1 minute coverage extends about 15 miles and the 3x3 minute about 100 miles in all directions beyond the California boundary. This digital model is adequate to compute terrain corrections to gravity data anywhere in California at a distance of about 1 1/2 to 100 miles from each gravity station and may also be of use in other scientific and environmental studies. A FORTRAN computer program used to convert 1x1 km UTM system digital data in southern California into the 1x1 minute format is included in the associated report (PB-219 795).

Order PB-219-795
Mag tape $97.50 domestic, $122.50 foreign

Description of Magnetic Tape Containing Average Elevations of Topography in California and Adjacent Regions for Areas of 1x1 Minute and 3x3 Minutes in Size.

Geological Survey, Menlo Park, California
S. L. Robbins, H. W. Oliver, and Donald Plouff,
Mar 73, 33p* USGS-GS-73-008

See also mag tape, PB-219-794.

Contains documentation of the magnetic tape. The report includes information about the validation of the elevation data, and a FORTRAN computer program listing. The program was used to convert 1x1 km data into the 1x1 minute format.

Order PB-219-795
PC$3.75/MF$1.45
MAPS OF THE WORLD

Francis Edwards Ltd., 83, Marylebone High Street, London, W1M 4AL, England has issued their Catalogue 552: Maps of the World. Two-Hundred-Forty-Two items have been listed, all pre-19th Century.

NATIONAL ATLAS OF CANADA

The Canada Map Office has announced that the remaining 63 sheets of the National Atlas of Canada are now available at a cost of $12.00. These final sheets along with those previously included in folios A and B will constitute the complete edition of the Fourth Edition of the atlas.

Individual sheets are available at a cost of .50 cents each. The educational discount will continue to apply only to the purchase of the individual sheets. The selling price of the complete contents, consisting of all of the 133 sheets of the atlas, will be $30.00. A $2.00 mailing and handling charge will be levied on the purchase of a complete atlas. The complete set, in an attractive dark blue leatherette covered fibre-board box, can be obtained for $36.00. The leatherette box can also be purchased separately for $4.00.

Orders may be sent to Canada Map Office, 615 Booth Street, Ottawa, K1A 0E9, with checks or money orders should be made payable to the Receiver General of Canada.

MAPS AVAILABLE: As part of the USGS/HUD/ABAG San Francisco Bay Area Environment and Resources Planning Study, the following maps for the Basic Data Contribution series are available from the USGS Public Inquiries Office, 555 Battery St., San Francisco 94111:

(#61) Map Showing Areas Bordering the Southern Part of San Francisco Bay Where a High Water Table May Adversely Affect Land Use (MF-520, 1:125,000). One map sheet tells about the depth to the top of the water table, outlines problems that may develop when the water table approaches the land surface and identifies areas where ground water may cause problems to landowners.

(#62) San Francisco Bay Region Land Use Maps: Two Samples (1:62,500). Two map sheets of a set of 44 show 1970 land use by census tracts in the region. Fourteen land-use types are divided into three major groups: livelihood; residential; and open space and agricultural.

(#63) Isopleth Map of Landslide Deposits in the Southern San Francisco Bay Region (MF-550, 1:125,000). One map sheet is a contour map of the distribution of landslides in Alameda, San Mateo and Santa Clara Counties and the southern portions of Contra Costa and Marin Counties.

MAPS AVAILABLE: As part of the USGS/HUD/ABAG San Francisco Bay Area Environment and Resources Planning Study, the following map is available from the USGS Public Inquiries office, 555 Battery, San Francisco, 94111: Interpretive Report 4, Flood Prone Areas in the San Francisco Bay Region (1:125,000). Three map sheets show areas in the Bay Region that may be inundated by 100-year floods. Text discusses 100-year floods and the compilation methods involved.
EUROPE

Kremling, Ernst, 1901-
vi,299,45 p. illus., col.maps. 25 cm.
Scale of principal maps 1:400,000.

1. Germany - Road maps. 2. Switzerland - Road maps. 3. Austria - Road maps. I. Title. II. Title: Atlas für Kraftfahrer und alle Reisenden.

Kremling, Ernst, 1901-
JRO Strassen-Taschenatlas: Deutschland, Nordostschweiz, Westösterreich. Mit 110 ... Kartenseiten, 72 Städtedurchfahrtsplänen, Entfernungsabelle und Ortsregister. München, JRO-Verlag [1951]
v p.,108,[40]p.of col.maps,52 p. 21cm.
Scale of principal maps 1:500,000.

1. Germany - Road maps. 2. Switzerland - Road maps. 3. Austria - Road maps. I. Title. II. Title: Strassen-Taschenatlas: Deutschland, Nordostschweiz, Westösterreich.

Kremling, Ernst, 1901-
JRO Verkehrsatlas für Strasse, Eisenbahn und Büro: Deutschland. Mit 138 ... Kartenseiten ..., 88 ... Städtedurchfahrtsplänen, einem Ortsregister ... und Angaben über Postämter, Bahnstationen ... München, JRO-Verlag [1953]
1 v.(various pagings) illus., col.maps (part fold.) 25 cm.
Scale of principal maps 1:300,000, 1:400,000, and 1:1,250,000.

1. Transportation - Germany - Maps. 2. Germany - Road maps. I. Title. II. Title: JRO Verkehrsatlas Deutschland für Strasse Eisenbahn und Büro.

Kremling, Ernst, 1901-
vi,420,48 p. illus., col.maps(1 fold. in pocket) 25 cm.
Scale of principal maps 1:400,000.

1. Germany - Road maps. 2. Switzerland - Road maps. 3. Austria - Road maps. I. Title. II. Title: Autoatlas: Deutschland, Schweiz, Westösterreich.

Kremling, Ernst, 1901-
JRO Autoatlas Deutschland,europäische Reiseländer. Mit 150 ... Kartenseiten, 88 ... Städtedurchfahrtsplänen, JRO-Autoführer der Bundesrepublik Deutschland und der Schweiz, Verzeichnis der deutschen Campingplätze, ausführliches Register mit sämtlichen Ortsnamen ... [12. Aufl.(14. Aufl. der JRO-Autoführer)] München, JRO-Verlag [1954]
x,416,98 p. illus., col.maps(1 fold. in pocket) 25 cm.
Scale of principal maps 1:400,000 and 1:2,500,000.

1. Germany - Road maps. 2. Europe - Road maps. 3. Switzerland - Road maps. I. Title. II. Title: Autoatlas Deutchland, europäische Reiseländer.

LATIN AMERICA

São Paulo antigo; plantas de cidade.
Text by Sérgio Milliet.
Maps, dated 1810 through 1897, and indice in pocket.

1. São Paulo, Brazil (City) - Maps.
I. Milliet, Sérgio, 1898- II. Comissão do IV Centenário da Cidade de São Paulo.
COFFEE CULTURE IN GUATEMALA: LOCATION AND MOVEMENT

by

Dr. Michael Bierchler
Assistant Professor of Geography
California State University at Fresno

Coffee is the leading agricultural product in world trade and is second only to petroleum among commodities of all types entering international commerce. In Guatemala, coffee has dominated the economy for almost a century, accounting at times for over 60 percent of the total export value. Currently coffee generates about one-third of that country's exports.

The cultivation and processing of coffee are among the most complicated and varied procedures of any agricultural products. Processing and preparation for shipment are particularly important in Guatemala, a nation which exports high quality "milds" coffees. Most Guatemalan coffee is grown under shade, at elevations between 1,500 and 5,000 feet, and is selectively hand-picked for mature coffee cherries.

Introduced to Guatemala about the middle of the eighteenth century, coffee was first grown in the vicinity of Antiqua. Coffee culture on a commercial scale began about 1800. After 1850, production expanded rapidly to its present day geographical patterns and export levels.

The location of coffee production in Guatemala is dependent upon a number of environmental and economic factors. Three major regions and a number of outlying areas can be identified on the basis of temperature, precipitation, precipitation.

* Summary of presentation to WAML Meeting, May 10, 1974, CSU Fresno.
soil, production, acreage, yields, farm size, altitude, and percentage of total area planted to coffee. The Western Region accounts for 58 percent of the total acreage devoted to coffee and 63 percent of total production. Second in importance, the Central-Eastern Region includes 26 percent of the total area under coffee and 26 percent of total production. The Cobán Region has 10 percent of the coffee acreage and 6 percent of production.

In general, the West is characterized by more rainfall, higher temperatures, deeper volcanic soils, lower altitudes for coffee, greater production, higher yields, and larger farms. The Central-East, in contrast, has less precipitation, a more well-defined dry season, higher average altitudes and cooler temperatures, smaller farms, and a higher quality coffee. Third, and quite different from the other major regions, the Cobán zone is well-known for its light but steady year-round precipitation, relatively poor soils, lower labor costs, production of coffee with a distinct flavor, and low yields.

Coffee moves from producer to port of shipment in a variety of ways. Some large farms process their own coffee and transport it directly to the port of shipment. These farms, possessing private processing facilities may buy and/or process coffee from smaller producers in their locale. More typically, a grower sells to a large exporter who receives the coffee at his mill, processes it, and transports it by truck or rail to the port of shipment. Ten large exporting firms ship nearly 80 percent of the total coffee exports. Most of the country's coffee, although produced in southwestern and south-central Guatemala, is exported through Puerto Barrios and Matías de Gálvez on the Atlantic coast. The major flows of coffee are (1) from the Western and Central-Eastern Regions via Guatemala City to Matías de Gálvez and Puerto Barrios; (2) from the West and Central-Eastern Regions to Guatemala City and then Camperico or San José, or to these Pacific ports from a large farm or an urban-based processing mill along the south coastal highway; (3) from the Cobán area to El Rancho and thence to Puerto Barrios or Matías de Gálvez; and (4) from the Cobán zone to Livingston via the Río Polochic and Lake Izabal, and thence to Puerto Barrios or Matías de Gálvez. At least some coffee, however, moves from every major producing area to every port.

Present trends indicate little change in (2) geographical patterns of production, and (3) general movements of coffee from production centers to seaports. Conversely, coffee is almost certain to decline as a proportion of total exports as the economy continues to diversify and the export trade is likely to become increasingly concentrated in a relatively small number of large companies.

Maps of Southern Guatemala to accompany presentation: [following pages]

1. Coffee Acreage
2. Coffee Regions and Outlying Areas
3. The Movement of Green Coffee by Rail to Puerto Barrios
4. The Movement of Green Coffee by Rail to Camperico
5. The Movement of Green Coffee by Rail to San José
SOUTHERN GUATEMALA

THE MOVEMENT OF GREEN COFFEE
BY RAIL TO PUERTO BARRIOS*

1000s of Bags of 154 lbs.

Source: Author's notes (Appendix C).
SOUTHERN GUATEMALA THE MOVEMENT OF GREEN COFFEE BY RAIL TO SAN JOSÉ*
THE MAP COLLECTION AT CALIFORNIA STATE UNIVERSITY, FRESNO, LIBRARY

by

Herbert Fox
Map Librarian

I wish to spend this time not describing our present map collection but discussing its development, past, present, and future. My hope is that by telling of my experiences, problems, and some of my solutions I may bring comfort and aid to those of you who, like me, have approached the practice of map librarianship with little special training and great trepidation.

Upon my arrival here in June 1969 I discovered that my duties as a reference librarian without seniority were myriad: agricultural pamphlets, master's theses, annual reports files, biography files, book selection in certain categories, interlibrary loan assistance, and maps—all of this in addition to fifteen hours per week at public service desks. At that time the map collection consisted of the army maps for which we were and still are a depository library, and a small case of outdated general maps, most of them published by the National Geographic Society. Circulation was restricted. As I remember it now, our map service to patrons was something I would rather not remember.

I soon decided that maps, by virtue of their neglect and their potential deserved my concentration. I began by reviewing the available literature on map librarianship. As you know, that is limited now and was even more limited five years ago. With the encouragement of Dr Madden, the (then) College Librarian, I made trips to the map libraries at U.C. Berkeley, Santa Cruz, Santa Barbara, and Los Angeles. The map librarians were wonderfully patient with the novice who had appeared on their doorsteps. I remember the look of disbelief on Sheila Dowd's face when she realized that I had no idea that maps could be purchased from agencies other than the local Rand McNally bookstore.

I left each of those libraries with an armful of xeroxed catalog cards, acquisition and circulation policies, vendor lists and everything else that might possibly help. I also left with the firm instruction to attend the next meeting of the Western Association of Map Libraries. I did attend, of course, and found the Association and its Information Bulletin immensely helpful.

As a direct result of the reading, the trips, and the WAML connections I began the methodical development of our map collection.

1. First, I formulated an acquisition policy. It is patterned after Berkeley's policy and has served us well to date.

2. I contacted the chairman of the Geography Department, gave him a copy of the acquisition policy, and invited the participation and requests of his department.
3. We pursued and managed to obtain depository status for a number of useful map series: the ACIC aeronautical charts in the ONC 1:1,000,000 series, Forest Service maps, and U.S.G.S. topos for the U.S. at 1:1,000,000 and 1:250,000, for California and for other western states. We presently cover twelve states and are adding three to four more each year.

Where I could not obtain maps on deposit I simply requested them as gifts. In this way we obtained aerial photographs, road maps, city plans, and so on.

4. I developed vendor files and obtained map catalogs from Edward Stanford, Zumstein and RV (now combined in Geo Center), I.G.N., and as many others, foreign and domestic, as I could obtain.

5. At this institution all ordering is done through our Acquisitions Department so I developed those acquisitions and accounting procedures for my office which would enable me to keep the necessary control and access to maps-on-order at all times. The system has worked well for three years and we have no reason to change it.

6. I requested and received an annual map budget. This year it was $2750, though that was later reduced to $2350. Naturally it has been spent.

7. We developed a more liberal circulation policy. That, together with map displays, publicity in the campus paper and through annual "new acquisitions" lists have greatly increased the use of our map collection.

8. As the collection grew we added map cases and improved our storage methods. For city plans and other folded items we obtained Princeton file boxes. For our self-serve collection of road maps we purchased open metal display boxes.

9. Though we do not have a cataloged map collection we do maintain a simple map index with entries for area and in some cases, publishing agency. Since I must depend upon considerable student help I have had to develop a manual. I discovered that students learn involved procedures more quickly from flow charts so that is the format used in our manual.

10. A cataloging and classification scheme is underway here but for lack of time is moving slowly. My assistant is presently engaged on a trial run, cataloging California geological maps in the USGS series. My ultimate objective is a cataloged and classified map collection.

11. The Department of Special Collections in this Library gathers materials of local historical value. These include maps and town plans. The head of that department and I work together in acquiring the latter. We also cooperate in discovering repair and storage techniques for such materials, e.g., chartex for backing and Seal-lamin for laminating, both applied with a heat press.
These have been some of the more significant steps in the development of this map collection. In this short presentation I could not offer detailed descriptions of procedures, files, and so on. Samples of my accounting forms, flow charts, etc., are on display and I will welcome questions from individuals.

The greatest single handicap of the map collection is the lack of a map room. As a direct result of the scattered collection we suffer thefts, damage to sheets, inefficient service to patrons, and wasted time for librarians. Drawings for a new five-story library building have been adopted and it is planned to have a Map Library of about 3,000 square feet on the fourth floor. Unfortunately the very earliest completion date may be 1977. Until then, we shall order maps with the blind faith that somehow we will find space to store them.

**Bench Marks!**

**ELIZABETH AL-HAZZAM,** Map Librarian, Hayden Library, Arizona State University, Tempe, has been on a special assignment—leave as Assistant Librarian, assisting the Director of the Library of the College of Petroleum & Mining (located at Dhahran, Saudi Arabia) in developing the Map Collection. During her absence (Dec. 1973-Aug. 1974), **GEORGE ILINSKY** has been in charge of the ASU Map Service.

**GEORGE R. DALPHIN,** Reference Librarian at Sandia Laboratories, Albuquerque, New Mexico (former Editor of the Geography & Map Division Bulletin 1956-62), has been appointed Honorary Consultant in Map Librarianship to the University of New Mexico Library.

**ROY BOSWELL,** Gilroy, California, dealer of antiquarian books and maps (History of Cartography and Discovery/Exploration) has arranged two exhibits this year to date: "Old Maps of the World, Charts and Maps of California Interest - 1375-1720 A.D.", exhibited at The University Library, California State University, Northridge, January 15 to March 31, 1974 (exhibited by the Collection for the History of Cartography, California State University, Fullerton [of which Mr. Boswell is the principal benefactor]); "The Iberian Origin of The Americas, Maps and Charts A.D. 1513-1851", an Exhibition - April 15, 1974 at the University Library, California State University, Fullerton, sponsored by the Patrons of The Library.

**MAUREEN WILSON,** Head, Map Division, University of British Columbia, will be on leave of absence during 1974/75. She will be an unpaid worker at Edward Stanford Ltd. in London, and will be visiting other cartographic institutions in Great Britain. Maureen has volunteered to investigate any problems or make inquiries with Stanford or other map institutions. She may be contacted at the following address: c/o Mrs. J. Barrett, 8 Greenhill Park, New Barnet, Herts EN5 1HG, England.

**STANLEY STEVENS,** WAML Treasurer and Editor, Information Bulletin, will address the annual meeting of SLA Geography & Map Division in Toronto on June 11. "Whose journal is it? Members' or Editor's?" will be the subject he will present as part of a panel of speakers on Cartographic Journal Publishing.
PERIODICAL AND BIBLIOGRAPHIC SOURCES FOR
GEOGRAPHY BOOK AND ATLAS SELECTION

by

Sandra J. Lamprecht
Geography and Map Librarian
California State University
Long Beach

Many map librarians augment their map collections with atlases and geographical works; however, no one specific reference work is adequate for a well-rounded geography acquisition program. For those willing to invest a little time, a plethora of potential ordering sources does exist in the forms of geography bibliographies and geographical periodical book reviews. The purpose of this discussion is to inform map and geography librarians of some of the references I find very useful in the fulfillment of my responsibilities for the growth and development of the geography collection at CSULB. Before I discuss these sources, however, I would like to give you some background information on the CSULB University Library -- in particular the Business, Economics and Geography Reference Department.

California State University, Long Beach was founded in 1949 and currently has a student enrollment which exceeds 20,000. The University Library is housed in a new five story structure in which the Business, Economics and Geography Reference Department is located on the 5th floor. This Department also houses the Map Room (my direct responsibility) and the California and United States Government Document collections. Our Department disseminates information to our patrons through three channels: subject lectures, departmental publications and reference service.

Subject lectures are requested by faculty members and details such as a convenient meeting time and the main thrust or emphasis of the lecture are usually discussed by telephone beforehand. When I present a "Map Room orientation" I begin by discussing the various geographical sources available in the Department to aid students in their geographical research. The U.S. Bureau of the Census publications (i.e. Census of Population and Housing for California and the United States, Census of Manufacturing, Census of Transportation, County Business Patterns, Census of Agriculture, etc.) are also introduced; my objective is not to inundate the students with a myriad of names and sources, but rather to alert them to the wealth of geographical and statistical sources. After the reference sources have been discussed, I visually display an assortment of maps from the collection. Many of our topographic map series are shown and we compare and contrast the diverse styles of the national cartographic agencies. Other representative maps are also presented as well as a sample of our air photographic coverage. I usually end the orientation by showing the students an "Isodemographic Map of Canada" (a cartogram) and asking what area is being depicted. (I conceal the title, of course.) Most of them are puzzled until geographic features (i.e. the Great Lakes) are pointed out.

The Business, Economics and Geography Department publishes bibliographies and bibliographic guides which are kept in notebooks easily accessible to patrons. Those which directly relate to geography include "Basic Reference Books in Geography", "Resources Management: A Selected Bibliography", "Water Pollution: A Selected Bibliography of California and United States Government Documents", and the Library of Congress Classification Schedule (abbreviated) for G (Geography), GA (Mathematical Geography and Cartography) and GB (Physical
We also publish New Acquisitions to the Map Room on a quarterly basis, and New Reference Books (also quarterly) which abstracts reference books received in the areas of business, economics, government documents and geography. These series have been well received by the faculty and students at CSULB.

I hope I have conveyed to you some of the services we provide for the geography students and faculty members for I would now like to share with you some of the periodical and bibliographic sources that I find useful in ordering geography books and atlases.

A very useful bibliographic source in geography is *The Research Catalogue of the American Geographical Society* (3) and its ten issue per year sequel *Current Geographical Publications* (4) which is arranged by area and subject. It lists books, pamphlets, government documents, periodical articles and maps received by the American Geographical Society Library. Another valuable publication (especially for identification and eradication of "weak" areas in the collection) is *A Geographical Bibliography for American College Libraries* published by the Association of American Geographers in 1970: one or two sentence annotations are provided for each of the 1760 subject area entries. These entries were selected by the authors as essential works for a core geography collection in an American undergraduate college library. (5)

*Geo Abstracts* (7) is a periodical solely devoted to abstracting geographical items of interest. It is published in six parts (each appearing six times a year) by Geo Abstracts, University of East Anglia. The sections include: A-Geomorphology (including glaciology, karsts, coasts, etc.); B- Biogeography and Climatology (including hydrology, oceanography and pedology); C- Economic Geography (including general and theoretical economic geography, historical geography, agriculture, forestry, transportation, economic regions, etc.); D- Social Geography and Cartography (including population geography, man and environment, regional studies, education, cartography, maps and atlases, etc.); E- Sedimentology (including rivers and alluvium, marine geomorphology, paleoenvironments, sedimentary geochemistry, etc.); and F- Regional and Community Planning (including planning techniques, practice and theory). Short to medium length abstracts are provided by authors, professional geographers and others; each issue comprises approximately 88 to 100 pages.

The British counterpart, *Current Geographical Publications* is *New Geographical Literature and Maps* published by the Royal Geographical Society. This is a bibliographic listing of new items received by the Royal Geographical Society Library in London, with a sentence of scope accompanying a selection of the entries. For those wishing to expand their foreign language collections, *Bibliographie Geographique Internationale* (9) and *Documentatio Geographica* (10) should definitely be consulted.

An organization which issues a useful bibliography series is the Council of Planning Librarians in Monticello, Illinois. Many of their bibliographies are of direct or indirect interest to the geographer (and hence the librarian). For example, CPL Exchange Bibliography # 263 *Bibliography of Computer Mapping* by D.R.P. Taylor (1972) cites both book and periodical articles of relevance, and CPL Exchange Bibliography # 358-359-360 *Urban Geography, 1950-1970: A Comprehensive Bibliography of Urbanism as Reflected in the Articles and Book Reviews of 72 American, Canadian, British, Dutch and Scandinavian Periodicals* by Sverre Strand (1973) is very useful for pinpointing a review of a book in urban geography you may have doubts about acquiring for your map library or geography collection. (It treats urbanism in its broadest context.) And please don't
overlook the special bibliographies that appear in book form: for example, Robert Durrenberger's Environment and Man: A Bibliography (1), and A Bibliography of Statistical Applications in Geography by B. Greer-Wooten. (2)

Many geographical periodicals can also be consulted for hopefully candid book reviews which can facilitate the acquisition decision as it is sometimes very difficult to order from title alone. (i.e., Clarence Glacken's Traces on the Rhodian Shore (3) hardly sounds like a historical geography classic from its title.) The periodicals I find especially helpful for ordering purposes (and which I review regularly) include: 1) Annals of the Association of American Geographers (quarterly). The book reviews are long and the reviewers are professional geographers. (Long reviews are over one-page in length; medium length - 1/2 page to one page.) 2) Australian Geographer published by the Geographical Society of New South Wales. Reviews are medium in length and the reviewers are professional geographers. A "Reviews in Brief" section follows. 3) Canadian Geographer: Géographe Canadien published quarterly by the Canadian Association of Geographers. Long book reviews by professional geographers with a "Book Notes" section usually following comprise the book review characteristics of this periodical. 4) Economic Geography published quarterly by Clark University has long book reviews by professional geographers. A "Books Received" section usually accompanies the reviews. 5) Geographical Journal published by the Royal Geographical Society (3 issues yearly). The reviews are medium in length -- an extensive portion of this journal is devoted to them along with "Shorter Notices" and "Glossary and Bibliographies" sections. 6) Geographical Review published quarterly by the American Geographical Society of New York also has long book reviews authored by professional geographers. 7) Professional Geographer published quarterly by the Association of American Geographers provides medium length reviews by professional geographers. 8) Special Libraries Association Geography and Map Division Bulletin published quarterly by Special Libraries Association has reviews by librarians and professional geographers. Those interested in more information concerning the book review characteristics of these journals plus thirteen more, are here referred to my article entitled "Geography Periodical Reviews: Essentials for Geography Collection Building", (4) which analyses the book review characteristics of twenty-seven major geographicals in terms of length of reviews, reviewers, approximate number of books reviewed in an issue and approximate number of pages devoted to book reviews in an issue. Cartographic journals (i.e. Bulletin of the Society of University Cartographers and Western Association of Map Libraries Information Bulletin) are also good geography and atlas review sources.

Three sources to consult (in addition to the aforementioned) when acquiring atlases specifically include Walsh's General World Atlases in Print 1972-1973 (5), Gerard Alexander's Guide to Atlases (16) and A List of Geographical Atlases in the Library of Congress (17) published by the Map Division of the Library of Congress. The raison d'être of General World Atlases in Print is to gather information, atlas reviews, and to critically evaluate 40 major and 100 smaller atlases (which retail at less than $7.50) published in the United States or the United Kingdom. The atlases are analyzed in terms of publisher, publishing history, participating cartographers and editors, retail price, purpose, scope and age suitability, scales, types of maps and balance of coverage. Critical reviews and informative articles are also cited wherever feasible. Two useful statistical tables rank the atlases according to a merit rating and give age suitability. The Guide to Atlases (an international listing with a publisher and lang-
usage index) and A List of Geographical Atlases do not provide annotations or criteria for selection; however they are valuable for atlas identification of specific areas or topics of interest. (18)

Other vital sources to include when ordering books and atlases include publishers' blurbs. Two companies that publish good catalogs are GeoPub Book Service of Tualatin, Oregon and W. Heffer and Sons of London. (19) Another useful source is the Subject Guide to Books in Print (20) which lists books available under the rubric "atlases" and "geography" (as well as specific location or subject). And don't forget many of the map library acquisition lists include new book acquisitions received.

In conclusion, I would like to state that it has not been my intention to discuss all possible geographical ordering sources (for that would require much more space), but rather I hope I have been able to convey to you many of the tools I find very helpful in my geographical acquisition work.

1. Maps published by Western Economic Research Company of Sherman Oaks, California are always enthusiastically received by the students. These maps depict distribution of income, Negroes, median rent, Spanish surname population, median home value, etc. by census tracts in the Los Angeles five county area. Maps of the San Francisco and San Diego area are also beginning to appear.


18. A new publication which sounds very promising is International Maps and Atlases in Print. (London: Bowker Publishing Co., 1974); however, I have not had a chance to examine it.

19. GeoPub Book Service provides abstracts of the books they have for sale as does W. Heffer and Sons in their Catalogue of Geographical and Earth Sciences.


LIBRARY OF CONGRESS NAMES HONORARY CONSULTANTS IN GEOGRAPHY AND CARTOGRAPHY

The Librarian of Congress has announced the appointment of Chauncey D. Harris, University of Chicago, as Honorary Consultant in Geography to the Library of Congress, and Arthur H. Robinson, University of Wisconsin, as Honorary Consultant in Cartography to the Library of Congress. Both appointments are for three-year terms and were effective March 1, 1974.

MAP DESIGNER WINS AWARD

Marjorie Roberts of Fairbanks, Alaska, has won a First Place National Award for "Excellence of Design" from the National Federation of Press Women for her Greater Fairbanks Area Map, 10th Annual Edition. Ms. Roberts, does business under the trade name of Alaskan Arctic Publications, (P.O. Box 438, Fairbanks, Alaska 99707). The map was received by your Editor from the Chamber of Commerce, 550 First Ave., Fairbanks, AK 99707. Free.
Acquisitions Lists
#1, p. 38-39.
#2, p. 45.

Acquisitions Sources
see: #3, p. 46-50.

Aerial Photos [ERTS]
see: #1, p. 24-25.
see: #3, p. 20-25.

Al-Hazzam, Elizabeth T.
"Arizona State University, Hayden Library: KWOC Index to the Map Collection."
#1, p. 26-37.
see: "Bench Marks!", #3, p. 45.

Alonso, Patricia A.G.
see: #1, p. 23-25.
see: #3, p. 32.

Ansari, Mary B.
"Planning a Modest Map Room for the University of Nevada, Reno Library"
#1, p. 40-46.

Arizona State University
see: #1, p. 26-37.

Atlases Cataloged at UCLA
#2, p. 35-37.
#3, p. 35-36.

Atlas Reviews
see: #2, p. 38-44, 45.

Atlas Selection
see: #3, p. 46-50.

Australian Map Curators' Circle
see: #3, p. 32.

Bathymetric Charts
see: #3, p. 3-9.

Bench Marks! [Personal News of WAML Members]
#2, p. 3.
#3, p. 45.

Bergen, John
#1, p. 56.

Berkeley Documentation Center
see: #2, p. 51.
see: #3, p. 30.

Bibliographies
#1, p. 5-11.
#3, p. 46-50.

Biechler, Michael
"Coffee Culture in Guatemala: Location and Movement."
#3, p. 36-42.

Blustein, Anna F.
"Atlases Cataloged at UCLA"
#2, p. 36-37.
#3, p. 35-36.

Book Reviews
#2, p. 44.

Boswell, Roy V.
see: "Maps & Charts 14th-18th Centuries."
#1, p. 12-16.
see: "Bench Marks!", #3, p. 45.

Bryan, Jr., Edwin H.
#2, p. 38.

California State University, Fresno
see: #3, p. 43-45.
California State University, Fullerton
see: #1, p. 12-16.

see: #1, p. 11.

Canadian Union List of Map Series
see: #1, p. 11.
see: #3, p. 31.

Capps, Marie T.
see: #1, p. 17.

Cartobibliographies
see: "New Mapping of Western North America"
#2, p. 47-49.
#3, p. 26-27.
see: "Acquisitions Lists"
#1, p. 38-39.
#2, p. 45.

Cartomatique
see: #3, p. 32.

Cataloging and Classification of Maps
see: Bibliography, #1, p. 10-11.
see: Herbert Fox, #1, p. 23-24.
see: Elizabeth Al-Hazzam, #1, p. 26-27.

Cobb, David A.
see: #1, p. 17.

Computer Mapping
see: #3, p. 31, 33.

Dalphin, George R.
see: "Bench Marks!", #3, p. 45.

Dowd, Sheila
see: "Bench Marks!", #2, p. 3.

Drexel Library Quarterly
— special issue on "Map Librarianship", #1, p. 17.

Duplicate Maps & Atlases Available
see: #1, p. 37.
see: #3, p. 27-28.

Ehrenberg, Ralph E.
see: #1, p. 17.

European Map Libraries
see: Mary Larsgaard, #2, p. 9-13.

Facsimiles of Maps
see: #2, p. 19-35.

Fessenden, Robert E.
"An Historical Atlas of Early Oregon" [a review], #2, p. 39-41.

Fetros, John G.
"Promoting the Map Collection"
#1, p. 18-22.
see: #3, p. 10-12.

Fox, Herbert S.
"The Map Collection at California State University, Fresno, Library",
#3, p. 43-45.
see: WAML Minutes, #3, p. 10-11.

Free and Inexpensive Maps
see: "New Mapping of Western North America"
see: "Duplicate Maps & Atlases Available"
see: "Publications of Relevance"
see: #3, p. 34.
see: [space fillers throughout each issue for miscellaneous announcements]

Gousha, The H.M. ... Company
"Nearly a Half Century at Making Maps", #1, p. 3-4.

Guatemala
see: "Coffee Culture in Guatemala — [with maps] ...", #3, p. 36-42.

Hagen, Carlos B.
see: #1, p. 17.
"New Series of International Bathymetric Charts", #3, p. 3-8.

Historical Cartography
see: #1, p. 12-16.
see: #3, p. 13-19.

Historical Geography Newsletter
see: #2, p. 50.

History of Cartography, Collection for
see: #1, p. 12-16.
see: #3, p. 13-19.
Hoehn, R. Philip
see: WAML Minutes, #3, p. 10.

Jewell, John
see: WAML Minutes, #3, p. 10.

Jobs, Wanted & Vacancies [Map Librarianship]
#1, p. 54.
#2, p. 49.

Kidd, Betty May
"Theodore E. Layng: on His Retirement"
#2, p. 15-17.

Kreiger, C. R. "Bob"
see: WAML Minutes, #3, p. 11.

Lamprecht, Sandra J.
"Periodical and Bibliographic Sources for Geography Book and Atlas Selection"
#3, p. 46-50.

Larkin, Bruce D.
"Atlas of China" [a review]
#2, p. 41-42.

Larsgaard, Mary
see: #1, p. 17.
"A Month in Europe..."
see: "San Francisco in October ... 1974" [plans for WAML meeting]
#3, p. 12.

Layng, Theodore E.
see: #2, p. 15-18.

Lowe, Ruthanne
see: "Bench Marks!"
#2, p. 3.

Lukens, Beatrice
see: WAML Minutes, #3, p. 10-11.

Madden, Henry M.
see: WAML Minutes, #3, p. 10.

Map Cataloging & Classification

Map Collections in Public Libraries
see: Patricia Alonso, #1, p. 25.

Map Librarianship
see: #1, p. 17.

Maps for Exchange
see: #2, p. 52.
See: #3, p. 27-28.

Margary, Harry
"Facsimile Reproduction of Early Engraved Maps"
#2, p. 19-30.

Neddermeyer, Gail
see: #1, p. 17.
see: "Bench Marks!", #2, p. 3.
see: WAML Minutes, #3, p. 10.

Nagy, Thomas
"Farewell to the Chief", #2, p. 18.

Nevada, University of... Reno
see: #1, p. 40-46.

New Mapping of Western North America
#2, p. 47-49.
#3, p. 26-27.

Oregon State University
see: #3, p. 20-25.

Pacific Islands Directory
see: #1, p. 25.

Phillips, Brian F.
see: #1, p. 17.

Planning a Map Room
see: Mary Ansari, #1, p. 40-46.
see: #3, p. 31.

Post, Jeremiah B.
see: #1, p. 17.

Promoting the Map Collection
see: John Fetros, #1, p. 18-22.

Publications of Relevance
#2, p. 46-47, 50.
#3, p. 26-27.

Public Libraries, Map Collections in...
see: #1, p. 25.

Remote Sensing
see: #3, p. 20-25.
Roberts, Marjorie
see: "Map Designer Wins Award", #3, p. 50.

Sayer, Mind
"How to Start a Small Map Library"
[a bibliography, revised, March 1973]
#1, p. 5-11.

Schacht, David W. [joint author]
"Environmental Remote Sensing Applications Laboratory, Oregon State University",
#3, p. 20-25.
see also: WAML Minutes, #3, p. 11.

Schrumf, Barry J. [joint author]
[with Schacht, see above entry]
#3, p. 20-25.

Society of University Cartographers
#1, p. 55.

Stevens, Stanley D.
see: #1, p. 17.
see: #2, p. 7, 13.
see: #3, p. 10-11, 45.

Thatcher, Edward P.
"Atlas National de Guatemala" [review], #2, p. 43-44.
"Gazetteers of the Northern Provinces of Nigeria" [review], #2, p. 44.

Trabing, Wally
"Maps are not for folding"
#3, p. 9.

Trevitt, Susan
see: WAML Minutes, #2, p. 7-8.
see: WAML Minutes, #3, p. 10-11.

Union Catalog of Maps
#2, p. 51.
see also: #3, p. 30.

U.S. Geological Survey [relocated]
#2, p. 50.

U.S. Library of Congress
see: #3, p. 50.

Vander Meer, Paul
see: WAML Minutes, #3, p. 10.

Western Association of Map Libraries
Bylaws, #1, p. 49-52.


Meetings: Announcements, Attendance
Lists, Minutes, Proceedings of...
#1, p. 47-48.
#2, p. 7-8.
#3, p. 10-12.

Members [Personal News of...] see:
"Bench Marks!", #2, p. 3.
#3, p. 45.

Membership List
#2, p. 4-6.

Occasional Papers
#1, p. 52.

Officers Elected
#1, p. 2, 49.
#3, p. 10.

Publications Advisory Committee
see: WAML Bylaws, #1, p. 51.
see: #2, p. 6.
see: WAML Minutes, #3, p. 11.

Publications Exchange
see: #2, p. 6.

Treasurer's Report
#1, p. 53.

Wilson, Maureen
see: "Bench Marks!", #3, p. 45.

Woodruff, Evelyn
see: WAML Minutes, #3, p. 11.