Western Association of Map Libraries

"... to encourage high standards in every phase of organization and administration of map libraries..."
New Rates Effective July 1, 1981

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A Geological Perspective

... a column for reports of cartographic products of interest to geoscientists and geoscience developments of interest to map librarians.

Searching for Maps in GeoRef*

by

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* Presented at ALA MAGERT, June 27, 1981
I. Introduction

What do you do when someone comes into your map collection asking for a specific kind of map like a geologic map of San Francisco, not knowing whether such a map exists? Probably you look in your collection first. If you don't find it in your collection, the next step is determining whether or not such a map exists at all. GeoRef is one of the tools that can help you do that.

Map librarians are quite conversant with online sources of cataloging data such as OCLC and RLIN but seem to be less familiar with other vendors of bibliographic information such as Dialog and SDC. Often Dialog and SDC are available in the map librarian's organization, but usually in another department such as reference. And that other department may not have expertise with GeoRef or with searching for maps.

This paper should give map librarians enough information to decide when GeoRef would be of use in searching for maps, and also provide a summary of the techniques for searching for maps which should be of use even to experienced GeoRef searchers.

First, we'll consider the scope of the GeoRef database and the role of the vendors in making the database accessible. Second, we'll look at a sample search for maps in GeoRef. Then we'll go through the unit record noting all the data elements which can help in a search for maps. Finally, I'll summarize the basic ways of searching for a map in GeoRef.

II. Background

GeoRef is a database produced by the American Geological Institute. The purpose of GeoRef is to cover the worldwide technical literature on geology and geophysics. It corresponds to five printed products. The Bibliography and Index of Geology is the only one which is current. The others are the Bibliography and Index of Geology Exclusive of North America, the Bibliography of North American Geology, the Bibliography of Theses in Geology and Geophysical Abstracts. The database at this time goes back to 1961 for the North American material and back to 1967 for the worldwide material. It is updated monthly and contains about 700,000 records. Coverage is international, with about 40% of the indexed publications originating in the U.S.

In Figure 1, a schematic of the relationships among database producers, vendors and users, AGI falls into the box labelled "Indexers." The GeoRef staff look at journals, books, reports, maps, etc., and record the essential bibliographic information and assign subject headings. This information
is stored on computer tape and used to produce the Bibliography and Index of Geology. The tape is also sold to vendors (in this case to System Development Corporation and to Lockheed) who load it on their computers and make it available for searching.

The content of the database, then, is the responsibility of AGI, and questions about the scope and the indexing policy can be directed to them.

(American Geological Institute, One Skyline Place, 5205 Leesburg Pike, Falls Church, VA 22041; 1-800-336-4764).

The search services are responsible for the way the file is searchable and you should contact them directly about access and search system training. GeoRef is available from SDC for $95 per connect hour and $.25 per citation for offline prints (SDC Search Service, System Development Corporation, 2500 Colorado Avenue, Santa Monica, CA 90406; 800-352-6689 (CA) or 800-421-7229 elsewhere). GeoRef is available from Dialog for $65 per connect hour and $.20 per citation offline (Dialog Information Services, Inc., 3460 Hillview Avenue, Palo Alto, CA 94304; 800-982-5838 (CA) or 800-227-1960 elsewhere). In order to search well, you must know both the database and the search system.

There are various aids to searching, some produced by the database producer, some by the search services. AGI publishes the GeoRef Thesaurus (new edition due summer, 1981) and the GeoRef Newsletter. They also conduct workshops around the country on using their databases. The search services both have manuals for detailed information about GeoRef and a one-sheet publication which is helpful to have at hand when you're searching. These are Dialog's "blue sheets" and SDC's Quick Reference Guide.

III. Sample Search

The sample search (Figures 2 and 2A) was done on Dialog. The numbers in the following descriptions of the search correspond to the numbers in the margin of the sample search.

Figure 2:

(1) Dial Dialog's phone number and connect the terminal.
(2) When the system responds, (3) type your password. (4) Dialog responds with "logon" information and news. (5) Tell it you want file 89, the number for the GeoRef file, by typing b (for begin) 89. (6) It changes files and tells you how long you were in the previous file. (7) When it gives you a ?, tell it to search for the term San Francisco by typing s (for search) San Francisco. (8) Dialog tells you there are 172 citations which have the term San Francisco. This is
set 1. (9) You ask it to search for the terms/map or maps.
(10) Dialog tells you there are 50,670 citations which have
the terms map or maps. This is set 2. (11) Type s DT=map
to ask it to search for the document type map (more about
document type later). (12) It tells you there are 9519 cita-
tions with the document type map. This is set 3. (13) Tell
it to combine sets 2 or 3. This will give us a set of all
citations with the terms map or maps or the document type map.
(14) There are 51,824 citations in set 4. (15) By telling it
to combine sets 1 and 4, you will get the set of citations
which have both San Francisco and map or maps or DT=maps.
(16) There are 17 of these.

Figure 2A:

(17) Tell Dialog to type out online from set 5 /in format 3/
the first 5 references by typing "T5/3/1-5." The references
come out in reverse order of their addition to the file, the
newest first. (18) Dialog types the first reference. The
other 4 are omitted from the figure. (19) Type "PR5/5/1-17."
Tell Dialog to print offline from set 5 /in format 5/ cita-
tions 1-17 (the full set). (20) Dialog confirms the print.
(21) When you are finished type "Logoff." (22) Dialog tells
you the date and time of logging off and how much money
you've spent online since the last begin command.

Figures 3 and 4 are examples of offline prints from Dialog
and SDC.

IV. Unit Record

Figure 3 is a unit record from the database as it appears in
Dialog. There are three kinds of elements that are of interest
in searching for maps: 1) those which designate the map format
(title, descriptors, notes and document type), 2) those which
designate the geographic area (title, descriptors and coor-
dinates), and 3) those which define the subject of the map
(title, descriptors and section headings).

A. Title

Often the words map or maps are used in the title of a
map. The subject and geographic area are also often in
the title. All title words are in the Basic Index in both
SDC and Dialog. (This means they are automatically
searched.)

B. Descriptors

Many assigned descriptors are in the GeoRef Thesaurus.
The thesaurus lists the types of maps indexed often enough
to require a descriptor in the thesaurus (Figure 5).
Descriptors can describe the format (e.g. geologic maps),
the geographic area (e.g. Santa Cruz Canyon) or the sub-
ject (e.g. gravity survey).
Defining geographic area is often a problem.

"GeoRef contains a lot of geographic terms, geologic-geographic terms, and physiographic terms. More than 50%, in fact. The general approach to indexing the geography at GeoRef is to include as many geographic terms as possible, from major area terms (Benin, Spain) to the smallest unit specified in the paper being cited (Timbuktu, Gibraltar). Thus for the United States as an example, the practice is to include the name(s) of state(s), major physiographic regions (e.g., Appalachians) if applicable, county (or counties), water bodies (rivers, lakes), basins, arches, swells and broads. The term 'United States' is always added to the document assuring retrieval of all papers on the major area unit without being forced to search for all states or countries as the case may be. The major area unit in most cases is the continent or ocean, or a major political subdivision like the US, USSR, Canada, and Mexico.

"The authorities for inclusion of geographic terms in the GeoRef Thesaurus are: The Columbia Lippincott Gazetteer of the World, the U.S. Board of Geographic Names, and the Times Atlas of the World. The major factor in inclusion or exclusion is the frequency of usage in the system." (GeoRef Newsletter, V.2 #1, April 1979.)

C. Document type (DT): Map is one of the designated document types. However DT has only been assigned since 1975, so searching DT=map cuts out all material earlier than 1975. You'll recall from the sample search in Figure 2 that there were only 9519 citations with the document type map out of some 51,000 citations with the term map.

D. Source or note: GeoRef notes the scale of the map, and notes sketch maps (those smaller than a page) in what is called the source field in SDC and the note field in Dialog. It is possible to stringsearch in SDC to locate a sketch map or restrict a scale.

In order to stringsearch, you first create a set of relevant citations, then give the command to stringsearch. Figure 7 is a sample search of this technique used to search coordinates in SDC.

It is rarely worthwhile to try to restrict the scale in your search. You can't range; that is, you must specify the scale and cannot ask for 1:24,000 or larger. One rarely needs sketch maps either. But if you were trying to be absolutely comprehensive about a particular area, stringsearching this field would be a useful technique.

It is not possible to search the note field in Dialog.
E. Coordinates: Coordinates have been applied to documents as specific areas since September, 1977. According to Chassan Rassam, writing in the GeoRef Newsletter, V.2, April 1979,

"This information is in addition to the geographic index terms discussed above. For a paper to be assigned these coordinates it must meet the following criteria:

a. The paper must deal with geography in a way relevant to the geology of the area. Studies on geologic research in West Germany do not receive coordinates, whereas studies on the geology of West Germany do.

b. The paper must deal with a geographic area of reasonable size, usually a political subdivision (country) or smaller. The United States or Europe don't receive coordinates but Southwestern Kansas does. Parts of seas and oceans receive coordinates. Usually one set of coordinates is supplied but sometimes two (when the study compares samples from two widely disparate areas). Studies on samples from widely scattered regions (such as geochemical studies) may not get coordinates at all, since it is felt that the geography is incidental and not relevant to the results in most cases.

W0971000 W0894500

The GeoRef editor, using standard atlases, defines a close-fitting rectangular area enclosing the region or features in the paper and proceeds to give four coordinates to that area: starting from the lower right-hand corner, a latitude is assigned, followed by the latitude of the upper right-hand corner (counter-clockwise), the longitude of that point, and finally the longitude of the upper left-hand corner.

"For facilitating the work, editors are given much latitude in assigning coordinates to a very small area, and the degree of confidence should be strictly applied only to degrees, not minutes and seconds.

"Many of the coordinates for larger regions have been entered in the Thesaurus file and are therefore assigned automatically, insuring some consistency. No such consistency is claimed for small (few degrees) areas."
"Finally, a geographic entity of very small proportions such as a town is assigned repeated latitudes and longitudes, i.e., subtracts on the two sets will give a zero."

Figure 6 shows the order in which GeoRef assigns latitude and longitude and the way the coordinates are written.

The files were loaded on SDC in such a way that you have to first search the appropriate five degree range (looked up in the user manual) and then stringsearch that set for the longitude and/or latitude desired (Figure 7).

I was never very successful at coordinate searching on SDC and anticipated greatly GeoRef's appearance on Dialog. However, I find searching coordinates on Dialog still disappointing, although it is significantly better than on SDC. On Dialog, first you search a range of latitude (e.g., s 1t=N353000:1t=N360000 where the : is the symbol for ranging). Then you search in the same way for a range of longitude. Then you "and" them together. Or you can use the command ss (select steps) to do this with one command.

You must include the proper number of O's and the two latitudes (or longitudes) must be in numerical order. You'll note in Figure 8 that in searching for the South China Sea, we first tried LN=E1280000:LN=E1050000, the appropriate order for the way GeoRef assigns coordinates (counter-clockwise from the lower right-hand corner). However, Dialog found nothing in this range and it's because the longitudes must be in numerical order for the ranging to work. Then you "and" them together. (Figure 8)

What you get is a set of citations which had at least one latitude in the range of latitudes you asked for and at least one longitude in the range of longitudes. So you may pick up citations covering large areas outside the range you're interested in. For example, if you searched for New Mexico you might pick up citations for Colorado, whose southernmost latitude was the same as New Mexico's northernmost latitude. There might be nothing at all within the area you specified. GeoRef's suggestion to solve this problem is to "and" a geographic term (in this instance New Mexico) in order to cut out the garbage.

An interesting aside: You'll note in the sample search of SDC for latitude and longitude of Mt. Hood (Figure 8) there were 22 citations. When I did the same search in Dialog there were only 21. The citation in SDC which wasn't in Dialog was the one in Figure 9.

When I looked it up in Dialog to try to figure out why, I found that the Dialog citation had only one set of coordinates. The SDC one has two. As Rassam noted in the
Newsletter, GeoRef sometimes assigns two sets of coordinates. Apparently Dialog dropped the second set of coordinates.

This is not a serious decision because the term Mt. Hood is a subject heading, so you wouldn't have missed the citation in a real search. However, it illustrates how the way the tapes are loaded can make a difference even when the database is exactly the same.

F. Section Headings (Categories) The hard copy Bibliography and Index of Geology is arranged by various subject categories (one set of categories for 1967-74 and one for 1975- (Figure 10).) Since 1975, all geologic maps larger than a page are included in Section 2-14, Areal Geology, Maps and Charts. So if you were looking for a geologic map you could combine 02-14/CC (in SDC) or SH-14 (in Dialog) with a geographic area term. This was suggested in GeoRef Newsletter, V.3 #1, May 1980, p. 1. But in testing it out, I found that it introduced a higher level of irrelevant hits (commonly termed garbage).

V. Summary and Conclusions

Geography and maps are important to geologists, and the GeoRef file reflects that importance. A single search of the file combining an area term with the term map or maps will elicit citations to maps picked up by GeoRef. More complicated strategies (such as coordinate searches) are useful for special cases. Figure 11 is a summary sheet of techniques and formats for searching which should serve as a summary of this paper as well as a useful tool to have near the terminal.
Figure 1

Schematic of the Relationships Among Database Producers, Vendors and Users

USER

PRINTED INDEXES
E.g., Bibliography and
Index of Geology

VENDORS
Lockheed, SDC

DATABASE on
Computer
Tapes
(e.g., GeoRef)

INDEXERS
(e.g., American
Geological Inst.)

JOURNALS,
Reports, Maps
(e.g., Geotimes)
Figure 2
Sample Search of GEOREF on DIALOG, Part 1

(1) ENTER YOUR DIALOG PASSWORD
(2) LOGON File34 Mon 8Jun81 17:07:42 Port056
(3) NEWS:
   Free half-hour in June:
   COMPRE DISSERT INDEX (#35)
   ENERGYLINE (#69)

   Now available:
   MEDLINE 75-79 (#153, 80+ (#154)
   ONTAP DIALINDEX (#290)
   TYMNET logon change
(5) ? B89:
    8Jun81 17:07:56 User15251
(6) $0.60 0.005 Hrs File34
    File89: GEOREF - 61-81/Jan
    (Cmp. American Geological Institute)
    Set Items Description
    -------
(7) ? S SAN FRANCISCO
(8)  1 172 SAN FRANCISCO
(9) ? S MAP OR MAPS
    22358 MAP
    44718 MAPS
(10) ? S DT=MAP
(11)  3 9519 DT=MAP
(12) ? C 2 OR 3
(13)  4 51824 2 OR 3
(14) ? C 1 AND 4
(15)  5 17 1 AND 4
Maps showing maximum earthquake intensity predicted in the southern San Francisco Bay region, California

Borello, R. D.; Gibbs, J. F.; Lajmic, K. R.


CODEN: XMSSDD

Subfile: B

Country of Publ.: United States

Doc Type: SERIAL; MAP  Bibliographic Level: MONOGRAPHIC

Languages: English

Note: Reprint. 1:125,000; eng. geol. maps

Latitude: N370000; N375250  Longitude: W121300; W1223730

Descriptors: *seismology; *California; *Pacific Coast; *earthquakes; engineering geology; intensity; maps; geologic hazards; Marin County; Contra Costa County; Alameda County; Santa Clara County; Santa Cruz County; San Mateo County; San Francisco; San Francisco Bay region;

United States; Central California; prediction; engineering geology maps; seismicity

Section Headings: 22. (ENGINEERING & ENVIRONMENTAL GEOLOGY)
Figure 3
Sample of a DIALOG OFFLINE PRINT

1005183   80-45625
Land use and land cover and associated maps for Albuquerque, NM, New Mexico
U. S. Geological Survey, USA
CODEN: XGROAG
Subfile: B
Country of Publ.: United States
Doc Type: SERIAL; REPORT; MAP
Bibliographic Level: MONOGRAPHIC
Languages: English
1:100,000; environ. geol. map
Latitude: N353000; N360000
Longitude: W1070000; W1080000
Descriptors: *New Mexico; environmental geology; land use; maps; Sandoval County; McKinley County; land cover;
United States; Albuquerque region
Section Headings: 22.(ENGINEERING & ENVIRONMENTAL GEOLOGY)

Figure 4
Sample of an SDC Offline Print

-1-
ACCESSION NUMBER  80-48775
TITLE
ORGANIZATIONAL SOURCE
SOURCE
DOCUMENT TYPE
ISSUE
AVAILABILITY
CATEGORY CODES
INDEX TERMS
SUPPLEMENTARY TERMS
COORDINATES
Land use and land cover and associated maps for Albuquerque, New Mexico
U. S. Geological Survey USA
U. S. Geol. Surv., Open-File Rep. (USA) (XGROAG), No. 79-1549, sheet, 1979, environ. geol. map, SCALE: 1:100,000
S (Serial); R (Report); MA (Map); MON (Monographic)
80-45625 (Bibliography and Index of Geology)
U. S. Geol. Surv., Rocky Mt. Mapp. Cent., Denver, Colo., United States
2-22 (Engineering & environmental geology)
*New Mexico; environmental geology; land use; maps.
Sandoval County; McKinley County; land cover; United States; Albuquerque region
N353000; N360000; W1070000; W1080000.
Figure 6
Assignment of Latitude and Longitude

LATITUDE 1; LATITUDE 2; LONGITUDE 1; LONGITUDE 2
N353000; N360000; W1070000; W2080000
HELLO FROM SDC/ORB1T IV. (06/09/81 2:18 P.M. PACIFIC TIME)
ENTER SECURITY CODE:
*************

PROG:
YOU ARE NOW CONNECTED TO THE ORBIT DATABASE.
FOR A TUTORIAL, ENTER A QUESTION MARK. OTHERWISE, ENTER A COMMAND.

USER:
FILE GEOREF

PROG:
ELAPSED TIME ON ORBIT: 0.01 HRS.
YOU ARE NOW CONNECTED TO THE GEOREF DATABASE.
FILE COVERS FROM 1961 THRU JUN (8106).

SS 1 /C?
USER:
N45-46 AND W120-124 AND OREGON

PROG:
NO PSTG (N45-46).
SS 1 PSTG (O)

SS 2 /C?
USER:
N45-49 AND W120-124 AND OREGON

PROG:
SS 2 PSTG (552)

SS 3 /C?
USER:
STRS 2/ORD : N452500: W1214000:

P
PROG:
<86> SEARCHED <6> MATCH. CONT? (Y/N)

USER:
Y

PROG:
<160> SEARCHED <11> MATCH. CONT? (Y/N)

USER:
Y

PROG:
<241> SEARCHED <22> MATCH. CONT? (Y/N)

USER:
Y

PROG:
<319> SEARCHED <22> MATCH. CONT? (Y/N)
Sample Coordinate Search on DIALOG

? S SOUTH CHINA SEA
14 93 SOUTH CHINA SEA
? SS LT=N0000000;LT=N2000000 AND LN=E1280000;LN=E1050000
15 9913 LT=N0000000;LT=N2000000
16 0 LN=E1280000;LN=E1050000
17 0 15 AND 16
? S LN=E1050000;LN=E1280000
18 4658 LN=E1050000;LN=E1280000
? C 15 AND 18
19 695 15 AND 18
? C 19 NOT 14
20 662 19 NOT 14
? T20/3/1-3
20/3/1
1042031 81-26237

Tectonics of North Vietnam
Van Dyk T'Yong
CODEN: GEOTBK ISSN: 0016-9521
Subfile: B
Country of Publ.: United States
Doc Type: SERIAL Bibliographic Level: ANALYTIC
Languages: English illus.

Citation Appearing in SDC Coordinate Search but not in DIALOG
Figure 10

Subject Categories in GeoRef

1975-to-Date Category Codes

2-01 Mineralogy and Crystallography (mineral data, crystal structure, crystal chemistry, crystal growth, phase equilibria, etc.)
2-02 Geochemistry (surveys, trace elements, isotopes, cycles, instruments, etc.)
2-03 Geochronology (absolute age, fission-track, time scales, tephrochronology, tree rings, exposure age, etc.)
2-04 Extraterrestrial geology (Moon, Venus, Mars, Mercury, Planet, Jupiter, planetology, etc.)
2-05 Petrology, igneous and metamorphic (igneous rocks, metamorphic rocks, metasomatism, metamorphism, phase equilibria, magmas, lava, intrusions, inclusions, etc.)
2-06 Petrology, sedimentary (sedimentary rocks, sediments, sedimentation, diagenesis, sedimentary structures, etc.)
2-07 Marine geology and oceanography (ocean floors, ocean basins, ocean waves, circulation, continental shelf, continental slope, etc.)
2-08 Paleontology, general (studies on fossil plants and animals, concepts, life origin, applications, methods, etc.)
2-09 Paleontology, paleobotany (fossil plants, palynology)
2-10 Paleontology, invertebrate (taxonomy, morphology, evolution, etc.)
2-11 Paleontology, vertebrate (taxonomy, morphology, evolution, etc.)
2-12 Stratigraphy, historical geology and paleoecology (biostratigraphy, lithostratigraphy, evolution of land masses, paleomagnetism, paleogeography, biogeography, etc.)
2-13 Areal geology, general (area studies dealing with more than one aspect of geology)
2-14 Areal geology, maps and charts (maps, cross sections, diagrams, with no separate text)
2-15 Miscellaneous and mathematical geology (biography, bibliography, annual reports, popular and elementary geology, mathematical principles, historical accounts, etc.)
2-16 Structural geology (tectonics, folds, faults, fractures, structural analysis, orogeny, etc.)
2-17 Geophysics, general (theoretical studies, experimental studies, models, observatories, etc.)
2-18 Geophysics, solid-earth (tectonophysics, plate tectonics, sea-floor spreading, crust, mantle, core, paleomagnetism, plate tectonics, etc.)
2-19 Geophysics, seismology (earthquakes, elastic waves, etc.)
2-20 Geophysics, applied (geophysical surveys, geophysical methods)
2-21 Hydrogeology and hydrology (ground water, drainage systems, recharge, hydrochemistry, etc.)
2-22 Engineering and environmental geology (foundations, earthquakes, dams, reservoirs, storage, rock mechanics, soil mechanics, pollution, conservation, reclamation, etc.)
2-23 Surficial geology, geomorphology (landform description, landform evolution, environment, etc.)
2-24 Surficial geology, quaternary geology (glacial features, glaciation, sediments, palynology, stratigraphy, etc.)
2-25 Surficial geology, soils (genesis, morphology, composition, etc.)
2-26 Economic geology, general and mining geology (mineral resources, water resources, production, concepts)
2-27 Economic geology, metals
2-28 Economic geology, nonmetals
2-29 Economic geology, energy sources (petroleum, gas, coal, oil shale, geothermal energy, etc.)
### SEARCH STEPS

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<thead>
<tr>
<th>I. GEOGRAPHIC AREA</th>
<th>LIMITS, CAUTIONS</th>
<th>SAMPLE FORMAT FOR LOCKHEED</th>
<th>SAMPLE FORMAT FOR SDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Determine geographic terms. (Use the GeoRef Thesaurus)</td>
<td>S Mount Hood or Mt. Hood</td>
<td>N35-39 (Look up correct range in SDC GeoRef user manual.)</td>
<td>Mount Hood or Mt. Hood</td>
</tr>
<tr>
<td>B. If necessary use coordinates. In Dialog, &quot;or&quot; the geography with coordinates. In SDC, stringssearch a broader geographic set for the coordinates of interest. Coordinates have been assigned since 1977 to papers and maps with geographic aspects. They are assigned in order from SE corner to NE corner to NW corner. Always combine coordinates with a geographic term. Coordinates are most useful in searches of the oceans.</td>
<td>1977 - You need the right number of zeros.</td>
<td>SS LT=N3530000:N3600000 and LN=W10700000:W1080000 (Dialog looks for the range between the numbers you put in.) (Range must be in numerical order.)</td>
<td>STRS 1/CORD:N3530000:W10730000: (The 1 is the set number for the set you want stringssearched.) SDC looks for the exact LN &amp; LT you put in.</td>
</tr>
</tbody>
</table>

### II. MAPS

| A. "And" the document type for map if you're only interested in citations since 1975. If you want everything, search the terms "map" or "maps" (in titles & subject headings) "or'd" together with document type. | 1975- | S DT=map | S DT=map or maps |
| B. If you also need sketch maps (smaller than a page) or if you wish to restrict the scale, stringssearch the source (on SDC). | | | map/DT all map# |

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N. J. Pruett - 8/81
Bench Marks!

MARY SCHELL
Charter Member of WAML, fourth President in 1970/71, Editor of the WAML Information Bulletin for Volume 2, has announced her intent to retire as Head, Government Publications Section, California State Library, Sacramento, and as a Member of WAML.

She was elected in 1969/70 as President/Elect and worked with President Robert Sivers on general program planning, she contacted speakers and arranged programs, arranged for meeting sites and participated as a member of the Executive Committee. As President, in addition to leading the General Membership meetings and the Executive, she edited the Information Bulletin. At that time, WAML had 56 individual Members, 8 Institutional Members, and 10 subscribers to the Information Bulletin.

On behalf of the entire WAML Membership, thanks and congratulations are extended to Mary Schell for her long and devoted support of WAML and her many contributions toward building WAML's reputation as an organization oriented toward serving its membership.

Good luck and good health in your active retirement!

MARVIN FALK
Member of WAML, formerly the Arctic Bibliographer at University of Alberta, Fairbanks (Elmer E. Rasmuson Lib.) has accepted a newly created position as Curator of Rare Books at the Rasmuson Library.

He recently completed a sabbatical leave taken at Cambridge University, England. He worked on maps of the Alaska region published in Europe. The results of his bibliographic work will be published by Garland Press as the Cartobibliography of Alaska to the Year 1900.

He presented a paper entitled Images of pre-discovery Alaska in the work of European cartographers at the Conference on the History of the Discovery of the Arctic Regions as seen through the Descriptions of Travellers and the Work of Cartographers from early Antiquity to the 18th Century. It was held at the Vatican, October 5-9, 1981.

{The Rare Map collection continues to be part of his responsibilities as Curator of Rare Books. His old position as Arctic Bibliographer was opened for recruitment until November 3, 1981 - salary range $37,211- $46,134.}
STEWEN Z. HILLER

Member of WAML, Map Librarian, University of Washington Libraries, Seattle, recently announced the results of his re-inventory of the Map Collection. When he was hired at the University he expressed his estimate that the 344,347 total items (325,000 maps) as reported in the third edition of *Map Collections in the United States and Canada* (New York, Special Libraries Association, 1978) was incorrect.

The inventory took a considerable amount of time, and partially due to an evaluation of the condition of the collection taken at the same time, the results are: 201,000 maps; condition: 20% good, 70% fair, 10% poor.

JOHN SUTHERLAND

Associate Member of WAML, Map Specialist, Science Library, University of Georgia, Athens, is now attending Library School at the University of Michigan on a fellowship.

CYNTHIA ANN EVERITT

Member of WAML, free-lance librarian in Salt Lake City, is interested in receiving some feedback on her article *Security in Map Collections* which appeared in the Winter 1981 issue of *Library Trends*.

She may be reached at 609 7th Ave., Salt Lake City, UT 84103, or a letter to the Editor of the WAML Information Bulletin will reach her as well as all librarians interested in this vital/crucial topic.

ANNA CHIONG

Member of WAML, Geography Librarian and Head of the Geography Library, University of Washington, has retired as of Dec. 31, 1981.

ALICE HUDSON

was named Chief of The New York Public Library's Map Division, effective Oct. 19, 1981.

Since January 1978, Ms. Hudson has been first assistant in the Map Division under Gerard Alexander, who retired in May 1981 after 35 years of service.

Ms. Hudson joined NYPL as a map cataloger-reference librarian in 1970. She is a member of the New York Map Society, ALA, and Special Libraries Association.

(NYPL, Fifth Ave at 42nd St., New York, NY 10018 (212) 930-0587) Map Division
EDWARD THATCHER

Founding Father of WAML, who was honored at the March 26, 1981 meeting in San Francisco upon his retirement, has been named Map Librarian Emeritus by the University of Oregon.

He sends the following Note of Thanks: "I offer much gratitude to all WAML members for the appropriate and beautiful retirement ceremony and gift which came to me at the dinner of the Spring meeting, 1981 in San Francisco. My wife and I are very proud of the handsome 12" Replogle globe now in our home. My special thanks to Dave Lundquist, the 1980-81 Executive Committee and to Harold Otness, LaVonne Jacobsen, Sue Trevitt-Clark, and Sheila Dowd for conspiring with the committee and for their special parts in that light-hearted, memorable ceremony.

Ed, who received WAML's first Honorary Life Membership at that occasion, and his wife will be hosts at a traveler's hostel for two years. Travelers or correspondents may find them at Friends Centre, 115 Mt. Eden Rd., Auckland, 3, N.Z.

STANLEY STEVENS

"The Geography and Map Division, Special Libraries Association, Honors Award for outstanding achievement in map librarianship was first presented in 1955. Nineteen eminent map librarians have been recipients through the years, all in institutions east of the Mississippi. In 1981 for the first time the award goes to a West Coast map librarian, Stanley D. Stevens, University of California, Santa Cruz."

So reads the citation, presented by Jean Ray, Map Librarian, Southern Illinois University, Carbondale, at the annual business meeting of SLA G&MD, Atlanta, June 15, 1981.

Serving on the Honors Committee with Ms. Ray were Roman Drazniowsky, American Geographical Society (University of Wisconsin-Milwaukee, and James A. Flatness, Library of Congress Geography and Map Division.

The full text of the citation appears in the Bulletin of SLA G&MD (No. 125, Sept. 1981, pp. 41-42.)
HONORS AWARD

The Honors Award of the Geography and Map Division, Special Libraries Association, is given upon recommendations of the membership at the discretion of the Honor Awards Committee, to an individual who has made an outstanding contribution in the field of geography, cartography, or map librarianship, either for specific activities or for general service and contributions in these fields. Past recipients are listed below. (Two awards were given in 1959. No award was made in 1956, 1958, 1960, 1966, 1969, 1971, 1974, 1979.)

1955 Marie C. Goodman  Library of Congress
1957 Clara E. LeGear  Library of Congress
1959 Ena L. Yonge  American Geographical Society
1961 Arch M. Gerlach  Library of Congress
1962 George R. Dalphin  Dartmouth College
1963 Walter W. Ristow  Library of Congress
1964 Nordis Felland  American Geographical Society
1965 Esther Ann Manion  National Geographic Society
1967 Alexander O. Vietor  Yale University
1968 Richard Edes Harrison  Department of State
1972 Robert Curtis White  University of Illinois
1973 Catherine I. Bahn  Library of Congress
1975 Lynn S. Mullins  American Geographical Society
1976 Mary Murphy  Defense Mapping Agency
1978 Mary Galneder  University of Wisconsin
1980 Maud D. Cole  New York Public Library
1981 Stanley D. Stevens  University of California - Santa Cruz
PHYSICAL PLANNING FOR MAP LIBRARIES – THE PROCESS

by

Gloria Novak
Library Space Planner
University of California
Berkeley

Introduction

Floor space has run out for the map cases that are needed for the new maps which continue to pour in, or dribble in, whichever the case may be. The automatic response is to look for more space in the building for map storage or to stack the map cases higher. Either, or both, of these alternatives may prove to be solutions to the map library’s space problem. However, I submit that these alternatives may not be the most appropriate solution and may be merely shortsighted, band-aid solutions staving-off the larger and more critical problems smoldering unseen in the background or lurking in the not-so-distant future.

The problem is to discover what the problem is. The discovery process requires action in three major areas: inventoring the existing map library and its operation and identifying a variety of related problems, establishing goals to serve as guidelines for the final solution, and investigating programs and technology to improve service and save space.

Inventory and Problem Identification

The first step in this discovery process is to describe the existing map library, its operation, and its general environment. To do this it is necessary to inventory the collections, the public services, and the staff operations. This information will also prove invaluable later in developing the final solution. After the inventory has been completed, the next step is to identify the problems which affect all aspects of the library operation. A word of caution here: do not be conditioned by tradition. Just because something cannot be done the way it has traditionally been done by map librarians does not necessarily indicate a problem; nor does the ability to do things in a traditional manner indicate that there is no problem. What is paramount is the endeavor to provide a superior public service; is this endeavor being hampered by the physical environment?

Collections

- The following are some items to be included in the inventory of the collections:
  -- Size of the current collection.
  -- Rate of future growth, at least a five-year projection, possibly a ten-year.

* Presented at the Spring Meeting, March 27, 1981, of the Western Association of Map Libraries held at the San Francisco Public Library.

Text finalized and presented for publication May 11, 1981.
Identify and count discrete collections, such as rare maps, rolled maps, relief maps, nautical maps, and microform collections.

Size of the book/atlas collections. A separate count for those volumes requiring special folio shelving is important.

This list is not exhaustive.

In examining the collection, carefully consider if it is really practical to stack the map cases higher. The tops of low stacks of map cases play an important function in map use that must not be overlooked. Map cases stacked too high can severely compromise physical access to maps for both the public and staff. However, safety is an even more serious factor to consider before making this decision.

The problem of safety is too often ignored. It is particularly important to use special ladders with side rails for accessing map cases stacked three or more high. Pulling out large maps from the drawers is especially awkward, and the concern to avoid damaging the map can easily lead to forgetting one's own personal safety. Safety officers recommend a clear and practiced policy to disallow wearing of shoes with high heels when using ladders.

In California there is the added problem of safety in the event of earthquake. In a quake of 6 or more on the Richter scale, it is almost certain the drawers will open. It is, therefore, important to check to be certain that the connection between the stacked cases is strong. Cases stacked three or more high must also be braced to the wall and/or to the stacks of cases on either side and behind so that individual cases will not topple.

Public Services - An inventory of the public served must not only include the number of patrons served daily and the maximum number of reader stations required at any one time but must also include a survey of how the public uses the collection. Note how heavily the light tables are utilized and how frequently photocopies and copies from microform are required. Consider services requested by patrons that are not currently available. Some patrons desire direct access to maps which must be paged by staff; consider the staffing and other operational benefits of direct access to some or all of the collection.

Significant use of rare maps which require close staff supervision will strongly influence the final design of a map library. Determine the problems that must be addressed in providing a rare map service.

List the problems you have in serving the public effectively. Gather the suggestions received for improving the map library's services. It may also prove useful to solicit suggestions from the clientele. The inventory process provides an excellent opportunity for looking at public services from a fresh point of view.

Staff Operations - In inventorying and generally examining staff operations, it is helpful to separate public service from processing. In practice, these operations may not be separable because of an insufficient number of staff. This particular factor will significantly impact the final layout of the map library, especially if a portion of the collection requires close supervision or heavy paging.
In reviewing the processing functions, study carefully the work flow, from receipt of the material through the various steps until the material is "shelved." Note if any part of this process is awkward or if materials are being handled too many times. Consider also the space adequacy for holding material until it can be processed, for processing material, and for holding material that has been used until staff can "re-shelve" it.

Environment - The general environment of the map library also deserves attention. For example, adequate lighting for reading maps is essential. It is necessary to consider not only the quantity but the quality of light available; does the lighting produce shadows or glare? Heating and ventilating must be examined, identifying drafts, dead air, and exceptionally warm areas. If rare materials are housed in the map library, temperature and humidity control is important for preservation. Rare collections may also pose a security problem; electronic access control systems can provide an effective solution. Pay attention to the acoustical environment; staff become acclimatized to the environment, but patrons may suffer from the din. The need for signs is often disregarded, but in fact they provide a useful adjunct to public service. A particularly critical environmental factor to study if there are plans for stacking map cases higher is the load-bearing capacity of the floor. If this capacity is not known, a structural engineer must be called in at some point before this decision is made.

Goals

Having inventoried the collections and operations of the map library and having identified a variety of problems (many of which, previous to this review, had never been obvious), one is now ready to establish realistic goals. At this point, it is appropriate to digress to explain how the mere lack of space for map cases has led us from the concrete task of inventorying existing conditions to the abstract process of establishing goals. If the primary goal for a library is to provide information to its public, to allow it to grow helter-skelter without a plan is to lose sight of this goal. In the past this unplanned growth could be tolerated to some degree; as evidenced by the new library buildings constructed, especially during the 1960s, the proliferation of branch libraries on many university campuses, and the increased size of the library staff. In the 1980s new construction is expensive and, concomitantly, often a politically unviiable solution; and library budgets, if not being cut, are in what is described as a steady state. Therefore, it is essential to consider carefully the goals of the library so that the final solution will not only address the problem of the space shortage for map cases but also the needs of the map library's public and the staff's ability to deliver service.

It is often difficult, especially when working with existing space, to achieve all the desired goals at the same time. There are many reasons for this, ranging from budgetary limitations to new developments in technology. It is wise, therefore, to establish both short-term and long-term goals and plan to accomplish them in phases over a period of time.

Programs and Technology to Improve Service and Save Space

The goals developed are service and operational goals. To aid in the accomplishment of these goals, it is useful to explore a variety of programs and technology with the potential capability of improving service and saving
space. The long-term solutions to space problems may lie in major policy decisions affecting the manner in which public services are delivered and in the adoption of new technologies to support a modified delivery system.

Map librarians are already actively discussing and, in many cases, involved in cooperative acquisition and interlibrary loan programs. They are also sharing information regarding the acquisition of maps in microform and potential programs in shared duplication of maps in microform.

Microfilm

Many are already aware that microfilm, that is roll film and microfiche, is a transition technology, but an important one, especially if the librarian has already faced the library's future space problems. The significant lag between the availability of new technologies and their adoption for accepted use is so great and the continuation of use of older technologies so long in duration that microfilm must not be overlooked as a possible alternative for map acquisition. Add to this the fact that more and more maps are being published in microfilm and that many aspects of this technology are undergoing significant improvements, and it becomes clear that this technology must be explored in some detail.

In contemplating this technology for use, other benefits in addition to that of space saving should be taken into account. Some of these benefits include:

--Reduction in handling of rare maps thereby strengthening the goal of preservation.

--Availability of information in a format which can be directly and easily accessed by the public.

--Improvement, in some cases, of the legibility of the original map.

--Possibility of storing the original map outside the map library. It is estimated that 75% of the time the microfilm edition will fulfill the patron's information requirements. In Northern California the completion of construction of the Northern Regional Library Facility, planned for 1982, will make it possible for cooperating libraries to store original maps under proper environmental conditions in this facility and to recall them for use only when the microfilm can not fulfill the patron's needs.

One must also recognize the limitations and difficulties posed by the use of this technology so that good decisions can be made for its use and so that strategies can be devised for effectively coping with its difficulties. The following are a few examples of limitations and difficulties in the use of this medium for maps.

--The color film used for color-coded maps is not archivally permanent, being subject to fading.

--Color duplication from film to paper is expensive.

--Color film does not have sufficient power of resolution to reproduce some of the smallest print sizes found on maps. This technology is continually improving, but many maps already reproduced on color film exhibit this problem.

--Microfilm lacks standardization in size and magnification. Therefore, care
must be taken in selection of both the microfilm and the equipment for reading it and reproducing it on paper.

Maps are frequently too large to be microfilmed in one exposure, which creates an additional set of problems:

1. Orientation of the film frames and microimages must be standardized to improve the ease of reading and interpreting maps published in a microformat. This problem of orientation is further compounded by maps lacking compass indicators and standardized notations and symbols.

2. Edge distortion can become a problem when it is necessary to combine more than one exposure.

Reproduction in a microformat can distort the mathematical relationships which determine the legibility of the final product.

The availability of maps in microfilm is uneven.

The cost of microfilming existing map collections is higher than the cost of the space it saves. However, if a number of libraries were to enter such a filming project collectively, this would no longer be true. The cost savings as well as the service benefits would be substantial, further imbibed for those in California and other areas with regional library facilities by the availability of a full-sized "original" for direct access when needed.

Video Disc - A technology promising considerable benefits for the storage and retrieval of maps is the video disc. A pilot project begun in 1978 by the Public Archives of Canada (PAC) included maps among the archival materials stored. Optical recording by laser beam converted documents into a video signal which was recorded on a video disc. The video disc information was tied into a floppy disc minicomputer and a small, intelligent terminal through which commands are given to access any frame. An interface was used to link the video disc player, the computer, and the terminal.

Substantial progress is being made in improving the technologies utilized by PAC. Recording of an original map will be greatly simplified with the use of a digital video effects unit called the Squeezezoom which eliminates the series of complicated steps required by PAC in recording maps.

A new commercially available application of optical disc technology is the Laserfile document storage and retrieval system developed at SRI International for World Development Laboratories in Concord, California, who has licensed Toshiba to manufacture and market the device worldwide as their Model DF-2000. This equipment records documents on optical discs and prints with as much resolution as prints from a conventional photocopier. However, at this time, it can record and print only material 8½" x 11" in size. The Toshiba representative has estimated that it will take five years for the company to develop the equipment necessary to record and print items as large as maps.

A comparison of optical discs with other storage techniques shows that, under current technology, laser-scanned optical discs slightly exceed magnetic disc storage capacity and far exceed computer-compatible tape or floppy discs. For large data storage and retrieval applications, RCA envisions a series of five "juke boxes" containing 100 optical discs each, providing 10½ bits of information on-line to a computer.
The ultimate video disc system will have a centralized video disc area which can be accessed by computer terminal from any location. Telidon, the videotex or two-way TV technology being developed in Canada, will be utilized to retrieve map information. The Canadian weather bureau is interested because Telidon alone has sufficient resolution to display weather maps at high resolution for internal use and at a lower resolution for users with less expensive terminals. The Canadians are also contemplating the use of a Telidon display terminal in the cockpit of an airplane which could provide pilots with a detailed map of the airport at which they'll soon be landing and save them checking through cumbersome reference books which they are now required to do.

In a recent conversation with a member of the U.S. Defense Mapping Agency, it was revealed that the Agency is building large databases of map-type data, not maps as such, and is working with Xerox to develop a system to play back the digital map data on paper. How map libraries will be able to tie into this technology is a question for the future.

In the meantime, the current advantages of video disc technology for map storage and access are impressive. The goals of the PAC project were:

1. to find a cheaper way of storing material,
2. to improve retrieval speed, and,
3. to improve life expectancy.

This pilot project successfully accomplished all three goals. In a report on the project, dated January 1981, Dennis A. Mole, Chief, Video Disc Systems of the Public Archives of Canada, provided a storage cost comparison based on cost per megabyte as follows:

<table>
<thead>
<tr>
<th>Storage Medium</th>
<th>Cost per Megabyte</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video disc</td>
<td>$0.02</td>
</tr>
<tr>
<td>Magnetic disc</td>
<td>$3.00</td>
</tr>
<tr>
<td>Magnetic tape cartridge</td>
<td>$0.40</td>
</tr>
<tr>
<td>Microfiche</td>
<td>$0.07</td>
</tr>
</tbody>
</table>

PAC reproduced 110 maps in 16,000 individual frames. Since each 12 inch disc holds 37,000 images, one disc theoretically could store 220 maps. One disc is 15mm thick. One standard filing cabinet can house 19,000 discs or a potential map capacity of 4,000,000 maps. Replication of the discs is already inexpensive and promises to be more economical in the future with RCA's claim that their video disc will eventually be available at a price as low as $10 each.

Retrieval speed is less than one second within the same disc. The longest retrieval time for materials stored in the PAC project was four seconds. Recall of the information by random access renders this medium infinitely superior to storage on microfilm.

The optical disc is also superior to microfilm for archival purposes. Photographic materials are subject to degradation and deterioration because of their chemical composition and use tends to damage them. The latest information from Mr. Mole, which he states is "firm", is that the disc produced by 3M has a 100-year life expectancy. Add to this the fact that, since the playback system utilizes a laser beam, there is no physical contact with the video disc. No wear occurs which could degrade the disc or the quality of informa-
tion on it. The 1,000th play of a disc will produce just as sharp and clear a picture as the first playback.

Color quality, which is so important for maps, is high and will continue to improve as the resolution capability of CRTs continues to improve. Color reproductions of maps from video disc will probably continue to be economically out of the reach of map libraries for longer than the five years projected for black and white copies. Xerox already has color copying capability, but whether or not their work with the U.S. Defense Mapping Agency will result in lower costs of color reproduction is an open question. Color prints of maps might also be produced in 8" x 10" size, glossy prints, directly from a CRT by a Dunn camera.

The troublesome issues of most concern to map librarians which have not yet been sufficiently resolved by technology are those of high resolution CRTs and blow-back of a map, or a detail of it, to its original scale or to a mathematically consistent scale. This also continues to be a problem for microfilm. At this time the economics of producing paper copies from video disc pose a problem for map libraries. The Laserfile unit produced by Toshiba is retailing at about $45,000; the Dunn camera at around $16,000. I have not researched other associated costs for producing copies.

Conclusion

To improve map information services for map library patrons and to achieve this goal in limited physical space, map librarians must adopt and be facile with a number of technologies. They cannot afford to wait for the ultimate storage and retrieval system for maps to reduce the rate of growth of their map collections and at the same time continue to provide access to the growing store of map information. This approach requires careful planning, careful decision-making, and development of substantial cooperative programs among map libraries to incorporate the various technologies now in use and proposed for future use.

To summarize, the process of planning the map library's physical environment begins with an inventory of the existing library holdings, services, and operations and identification of the problems. The next step is to establish goals for service and for correction of the problem(s) identified. With the endless production of map information and the increasing premium on space, it is not enough to consider merely the physical solutions to the space problem. New technologies, revised operational patterns and new service and interlibrary cooperation policies, all can help to solve the map library's space problem, especially the long-range, future space problem which confronts all libraries.
Fire Insurance Maps in The Library of Congress


The time when the map curator needed an introduction either to the fire insurance map or to the Sanborn Map Company has long since passed. Numerous articles and essays appearing over the last four decades have documented the importance of this cartographic genre to a variety of researchers ranging from the urban archaeologist to the bottle-hunter, and have given us an increasingly complete picture of the activities of the Sanborn Company itself.

The major difficulty, until relatively recently, was to discover which fireinsurance plans were extant, and to find out where they were located. Prior to the publication of Rees and Hober's Catalogue of Sanborn Atlases at California State University, Northridge (WAML, 1973), we had very little specific knowledge of where particular maps were housed. Two subsequent checklists, the Union List of Sanborn Fire Insurance Maps Held by Institutions in the United States and Canada (WAML, 1976-77), and Hayward's Fire Insurance Plans in the National Map Collection (Public Archives of Canada, 1977) substantially filled in this cartobibliographic void. Several state and provincial lists, such as Woodward's Fire Insurance Plans of British Columbia: a Checklist (TRIU, 1974) contributed even further to our inventory. Collectively, these various works recorded perhaps 400,000 sheets of fire insurance plans, including multiple locations.

But now, with the publication of this long-awaited list from the Library of Congress, we have taken a giant step forward. LC's hefty tome, the product of more than four years' work by many individuals, lists 700,000 maps covering some 12,000 communities or locations in the United States, Canada, Mexico and Cuba. The maps date from 1867 to 1978.
The major portion of the checklist covers the United States and is arranged by state, and then by community name. This is followed by a section of "Whiskey Warehouse Specials" for a number of eastern states. Finally, the work lists five plans covering communities in British Columbia (apparently the only Canadian province mapped by Sanborn), and ten in Mexico. There is also an entry for a 1920 set of plans of sugar warehouses in Cuba. Information provided under each entry includes edition dates, number of sheets, and contents and other explanatory notes when they are required. The size of sheets is given if it varies from the standard 65 x 55 cm. An "Index to Cities and Towns" appears in the back of the volume, as does a county index, referring by entry number to all maps covering communities within a particular county (or borough, census division or parish).

The availability of photocopies from the Library of Congress is discussed in the preface, which also contains a list of institutions (one per state) which received duplicate Sanborns of their state from LC. These institutions are very likely to have most of the uncorrected maps listed in this LC bibliography, and it would be well worth checking with them if their holdings are not included in the WAML Union List.

Reproductions of map sheets, legends, and a portrait of D.A. Sanborn are among the volume's 32 illustrations, most in black and white. Walter Ristow's excellent introduction provides an interesting and informative account of fire insurance mapping and of the Sanborn Company itself.

There is little to fault in this book. One wonders, however, if users might have been better served by the inclusion of cross references within the body of the work rather than in a separate index. On the other hand, the city/town index should serve fairly well as an historical gazetteer for some relatively obscure U.S. communities. Some users may overlook relevant material because of a lack of consistent cross-referencing within the index itself. While it does include many "see" and "see also" references, none are to be found in several places where they would be helpful. For example, "Lankershim, Calif." (misspelled "Landershim") is the earlier name of "North Hollywood." Maps are listed in the checklist under both names, but these are not connected by "see also" references in the index. The same holds true for "Piedras Negras" and "Ciudad Porfirio Diaz." There are no mutual "see also" references for "San Marino, Calif." which is represented by a separately published map and by its later inclusion in a volume of "Pasadena, Calif." In addition, communities which have been absorbed by a larger city are not always cross-referenced, for example, "Ocean View, Calif." which is now a part of "San Francisco." "Ocean View" is also not to be found in the county index. If this list is used in conjunction with the WAML bibliographies, this problem should be relatively minimal, since both the LC and WAML works contain unique cross references. Furthermore, most serious researchers will no doubt look under alternate possibilities, and would in most instances find the county index helpful. Given the otherwise careful editing and overall high quality of the compilation, the referencing problem is a fairly minor one.

The compilers of this milestone in cartobibliography cannot be praised too highly for their achievement. This important reference book should be in every map library.

-- Philip Hoehn
University of California
Berkeley, CA 94720
The New Penguin World Atlas


This is a new edition of the Penguin World Atlas, published in 1974. The revised version, like the original one, was produced in cooperation with the Cartographic Department of Oxford University Press; the editor is Professor of Geography at the University of Reading. Most of the maps are devoted to topographic and political boundary details, but a few show such physical features as mean annual rainfall and mineral concentrations.

In general the cartographic work is of a high quality, but a few omissions and idiosyncrasies are worth noting. The British origins of the atlas are made obvious by the relatively large scales chosen for the various sections of the United Kingdom as compared to the rest of the world. Also, special maps of population distribution and energy source locations are provided for the U.K. only.

There is no key to the urban symbols used throughout the volume, and the only metropolitan areas shown in large-scale insets are Tokyo-Yokohama and Kobe-Osaka-Nagoya. The polar regions are not exhibited completely; the Arctic Ocean and Antarctica appear only as fringes on maps of lower latitude regions. Finally, American users may be disappointed to discover that Hawaii appears only near the fold of a Pacific Ocean map with a scale of 1:63-million.

In general, despite the criticisms voiced above, this is a serviceable and inexpensive atlas which can be recommended to the general reader.

Jack W. Weigel
University of Michigan Library
Ann Arbor, MI 48109

Handbook of Geographical Nicknames


The Handbook of Geographical Nicknames supplies a previously unavailable resource for easily finding nicknames of places and geographic features the world over. Although the word "nicknames" used in the title implies a degree of briefness and graphicness, the work also includes longer sobriquets and appellations such as "The Town of the Ford of the Hurdles" and "The Sixteenth Century Emporium of South American Trade."

The volume is quite slim (153 pages) for such an endeavor, as compared to the 429 pages comprising Kane and Alexander's Nicknames and Sobriquets of U.S. Cities, States and Counties (Metuchen, N.J.: Scarecrow Press, 1979) which has a more limited scope. The type-face used makes the work very legible with the proper names in bold print and the nicknames or phrases in small print. All entries appear in a single alphabet with a brief notation on location following the main entry. The total or even an estimate of the number of distinct entries is not disclosed; however, it is probably fewer than one might expect because cross references are made from all significant words in the nickname
to the main entry. The most critical shortcoming in the arrangement of the work is the lack of a geographical approach to the entries. A listing of nicknames by country would have greatly added to the usefulness of the book.

A sampling of the first 75 pages reveals that the majority of entries are from Europe followed by the United States. Noticeably lacking are Latin American nicknames such as Montevideo, the City of Roses; Valpariso, City by the Sea; Buenos Aires, the Big Apple South; and Santiago, City of the Southern Sun. Other significant omissions include Perth, the City of Lights; Manila, the Pearl of the Orient; and Stockholm, the Venice of the North. Nicknames of American cities, states and counties are supposedly not included; however, listings for Hawaii; Kauai; San Clemente; California and the names of well-known sections of cities such as Harlem can be found.

Some of the nicknames employed are so commonly used that they are not generally thought of as nicknames. For example, the Yellow River is given as a nickname for the Huang Ho and the Great Divide is given as a nickname for the Continental Divide. Furthermore, the description of the Continental Divide leads one to believe that it only occurs in the Rocky Mountains of North America.

In the foreword it is pointed out that "nicknames have come to be applied to geographical areas for a number of reasons," however, the sources from which the nicknames were taken are not mentioned. Also a wider selection of resource libraries would certainly have added many more nicknames to the work.

In summary, the Handbook is reasonably priced ($10) and well-bound, and though it could be improved and expanded considerably, it should prove to be a useful work for general collections in public and academic libraries.

June C. Harris
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Detroit Public Library
Detroit, MI 48202

Concepts in the History of Cartography


The history of cartography as a separate field of research is over a century old, with many antecedents. During this time a considerable body of scholarship has been created. Even so, Blakemore and Harley argue that it lacks direction, a common terminology and methodological rigor. This is because not enough attention has been paid to these things and because contributions to the field have been from a great variety of disciplines. This essay should advance the level of debate and it should be read by anyone wanting an overview of current scholarly trends. One has the feeling, however, that it does not really go far enough.

This . . . "essay offers a selective historiographical treatment with emphasis on Anglo-American writings from the last three decades (p. 1)."

Fair enough, but in this very international field, wouldn't we gain a great deal by examining the methodologies in use in a broader context? A second difficulty is that while they review weaknesses and limitations in current methodology, one could wish that they would offer more in the way of solutions and suggestions for future research direction. Not an easy task. Perhaps the greatest value of this book is to remind us once again that an historic map can provide a great deal of information if it is examined in many ways. This will bear fruit as we learn more about contemporary visual conventions and symbols so that we can better understand what a map "said", as we understand printing histories and the evolution of images better, and as we use concepts such as "accuracy" with more sophistication when applied to maps.

Dr. Marvin W. Falk
Curator of Rare Books and Maps
Elmer E. Rasmuson Library
University of Alaska
Fairbanks, AK 99701

World Directory of Dealers in Antiquarian Maps


What map librarian is not frequently called upon to supply the names and addresses of antiquarian mapsellers? This attractive and easy-to-use work readily provides that information and more.

It is a much enlarged version of a directory first published in 1977. This second edition lists over 500 dealers in 38 countries--the first listed some 260 mapsellers in 23 countries. Newly added, for example, are shops in Argentina, Hong Kong, Iceland and Mexico. Incidentally, London has the largest number of dealers. At 54 it is far ahead of its nearest competitor, Paris, which has 23. Amsterdam and New York share third place with 16 each.

The directory is arranged geographically by country, then city. For some entries only name and address is provided, but the overwhelming majority also include phone numbers. For about half the listings, however, such additional information as hours, catalogs (with their frequency and terms of availability) and categories of materials normally kept in stock, is also included.

This is an indispensable tool for every map library.

Philip Hoehn
University of California
Berkeley, CA 94720

The Travel Book: Guide to the Travel Guides


This book first appeared in 1973 as Suit Your Spirit and in 1978 it became Travel Guidebooks in Review. Each change in title has marked an improvement in
coverage, format, and writing. Heise is Director of the International Center at the University of Michigan so it is no surprise that this book is particularly good in its coverage of guidebooks aimed at the low-budget student (and faculty) traveler.

The arrangement is first geographical - world, continents, nations, states, and within each grouping the books are listed under such headings as comprehensive guidebooks, accommodations and restaurant guides, camping, children, etc. The reviews themselves run about a half page each, and they are both descriptive and critical. The critical comments are a bit on the kind side, but they show basic good judgment. According to the introduction, only books supplied by their publishers are included here. Thus these are not necessarily the best guidebooks available, and there are some serious omissions and gaps. The present-day Baedekers are not included and not a single guidebook on India is reviewed. In all about 600 guidebooks are covered, but this includes titles in series which have a single review. About half the books concern the United States. Most of the reviews are for books published in the last three or four years. There is a subject-title index and a directory of publishers in the back.

Map librarians will be disappointed that so little is said of the maps to be found (or not to be found as the case may be) in the guidebooks covered. Nevertheless, because we are so often asked for travel advice, this book will have some utility in a map library. There is nothing comparable on the market, and any attempt to impose some critical bibliographic control over the vast outpouring of guidebooks should be looked upon favorably.

Harold M. Otness
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Library, Ashland, OR 97520

Place-Name Changes Since 1900: A World Gazetteer

Room, Adrian. Place-Name Changes Since 1900: A World Gazetteer.
ISBN: 0-8108-1210-X.

As Room points out in his introduction to this volume, the last seventy-five years have been a time of unprecedented change in the political and cultural geography of the world. During this period, two major wars and numerous regional conflicts have been fought; nations have emerged from former colonies and empires; and groups holding special religious, linguistic, and/or political beliefs have won control of land and governments. These changes and others have resulted in the renaming of thousands of places, from cities and villages to counties and countries.

This gazetteer has been compiled as an index to the official name changes which have taken place worldwide since 1900. It is not intended to be comprehensive but comprises major name changes, rather than spelling modifications, alternative names, or administrative reorganizations. It is arranged alphabetically. Each entry includes the current and previous name, its feature designation and location, and the year of the change, if known. Former names are cross-referenced.
As a general reference tool, the book is very helpful. It is the most up-to-date (late 1970s) compendium of its size (4300+ name changes) and is very reasonably priced at $11.00. Though coverage is worldwide, Russian and Chinese name changes are especially well-represented. However, the volume is not suitable for in-depth research. At this time, there are no detailed sources of worldwide name changes covering the period since 1900. Therefore, researchers needing access to the thousands of other name changes must still rely on the few sources available for specific areas.

This volume is recommended for anyone needing a quick guide to major recent name changes, but not for anyone desiring a detailed source of information.

Janet K. Rudd
Information and Data Manager
McClelland Engineers, Inc.
Ventura, CA 93003

FORTHCOMING ARTICLES

EDITOR's NOTE:

Due to the limitations of space and economics, the following features are held over for the next issue:

U.S.G.S. Topo Quad Count by State -- by Charley Seavey

News Notes -- five pages of items prepared for current issue that are of interest but without time value

The Sherman Day 1850 Map of San Jose and how to correct L.C. cataloging, by Stanley D. Stevens

Announcement of the Establishment of WAML Endowment Fund

Maps, History, and the San Diego Environmental Consulting Industry, by Frank Norris

Official Highway Maps for States and Provinces of North America, by Edward P. Thatcher

Selected Transportation Maps of the Pacific States, 1940 or Earlier, at The University of Oregon, by Edward P. Thatcher
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<th>Scale (ca.)</th>
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<td>Arizona, 1:24,000, superseded.</td>
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<td>Canada land capability, including forestry, agriculture, wildlife and recreation.</td>
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<td>Denver bikeways</td>
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<td>Der Islam in Vergangenheit und Gegenwart</td>
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<td>Crater Lake, OR</td>
<td>1:250,000</td>
<td>1974</td>
</tr>
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<td>Grants Pass, OR</td>
<td>1:250,000</td>
<td>1974</td>
</tr>
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<td>Coos Bay, OR</td>
<td>1:250,000</td>
<td>1974</td>
</tr>
<tr>
<td>Oregon City, OR</td>
<td>1:250,000</td>
<td>1974-75</td>
</tr>
<tr>
<td>University of California (Berkeley) campus</td>
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<td></td>
</tr>
<tr>
<td>Texas geology (post card)</td>
<td></td>
<td>1967</td>
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<tr>
<td>Gowans &amp; Forcune, Dist. of Nipissing (Canada)</td>
<td>1:125,000</td>
<td>1911</td>
</tr>
<tr>
<td>Tiswan population</td>
<td>1:500,000</td>
<td>1965</td>
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<tr>
<td>California topographic quads &amp; geologic</td>
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<tr>
<td>map index</td>
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<td>1944</td>
</tr>
<tr>
<td>Western Amador &amp; Calaveras Counties, Calif.</td>
<td>1:130,000</td>
<td>1940</td>
</tr>
<tr>
<td>Great Smoky Mountains National Park</td>
<td>1:150,000</td>
<td>1980</td>
</tr>
<tr>
<td>Solano County, Calif. aerial photo</td>
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<tr>
<td>(2 sheets)</td>
<td>1:20,000</td>
<td>1937</td>
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<tr>
<td>Imperial County, Calif. Salton Sea</td>
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<tr>
<td>geothermal (GL-1) 1:20,000</td>
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<td>1971</td>
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<tr>
<td>World aeronautical chart: Beaton River</td>
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<td></td>
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<tr>
<td>(2139)</td>
<td>1:1,000,000</td>
<td>1975</td>
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<tr>
<td>San Joaquin County, Calif.</td>
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<td></td>
<td>1970</td>
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<tr>
<td>San Joaquin County, Calif.</td>
<td>1:65,000</td>
<td>1952</td>
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<tr>
<td>Mariposa County, Calif.</td>
<td>1:150,000</td>
<td>1907</td>
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<td>California-Nevada road map</td>
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<td>California-Nevada road map</td>
<td></td>
<td>1969</td>
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<td>California-Nevada road map</td>
<td></td>
<td>1936</td>
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<tr>
<td>California-Nevada road map</td>
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<tr>
<td>Arizona road map</td>
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<tr>
<td>Arizona-New Mexico road map</td>
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<td>Oregon road map</td>
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<td>Oregon road map</td>
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<td>Washington (State) road map</td>
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<td>Washington (State) road map</td>
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<tr>
<td>Utah road map</td>
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<td>Ukiah District, Calif. planning units</td>
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<td></td>
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<tr>
<td>(multi sheet set)</td>
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<td>1970-</td>
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<tr>
<td>Santa Clara Co., Calif. school districts</td>
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<tr>
<td>Extent of aerial photography, U.S.</td>
<td></td>
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<tr>
<td>1:10,000,000,000</td>
<td></td>
<td>1938</td>
</tr>
<tr>
<td>Douglas County, Wash. 1:130,000</td>
<td></td>
<td>1940</td>
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<tr>
<td>U.S. Congressional Districts, 91st Congress</td>
<td>1:5,000,000</td>
<td>1968</td>
</tr>
<tr>
<td>U.S. Congressional Districts, 92nd Congress</td>
<td>1:5,000,000</td>
<td>1970</td>
</tr>
<tr>
<td>Glenn &amp; Colusa Counties, Calif.</td>
<td></td>
<td></td>
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<tr>
<td>1:120,000</td>
<td></td>
<td>1908</td>
</tr>
<tr>
<td>Colusa County, Calif. 1:63,360</td>
<td></td>
<td>1920</td>
</tr>
<tr>
<td>South America 1:1,000,000 Rio Sao Francisco, Brazil 1:1,000,000</td>
<td>1934</td>
<td></td>
</tr>
<tr>
<td>Status of aerial photography, U.S.</td>
<td></td>
<td></td>
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<tr>
<td>1:5,000,000,000</td>
<td></td>
<td>1954</td>
</tr>
<tr>
<td>World 1:500,000: Salzburg</td>
<td></td>
<td>1964</td>
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<tr>
<td>Operational navigation chart (ONC F-11)</td>
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<td></td>
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<td>1:1,000,000</td>
<td></td>
<td>1975</td>
</tr>
<tr>
<td>Northern Hemisphere</td>
<td></td>
<td>1965</td>
</tr>
<tr>
<td>World aeronautical chart: Great Salt Lake</td>
<td></td>
<td></td>
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<tr>
<td>1:1,000,000</td>
<td></td>
<td>1945</td>
</tr>
<tr>
<td>World aeronautical chart: Bitterroot Range</td>
<td>1:1,000,000</td>
<td>1945</td>
</tr>
<tr>
<td>Sacramento, Calif. road map</td>
<td></td>
<td></td>
</tr>
<tr>
<td>California Senatorial, Assembly &amp; Misc. political districts (multi sheet)</td>
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<td>1960-70</td>
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</table>
Duplicate maps of the University of California, Davis

The following are wall maps:

<table>
<thead>
<tr>
<th>Map</th>
<th>Scale (ca.)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona, topographic</td>
<td>1:500,000</td>
<td>1933</td>
</tr>
<tr>
<td>California, base</td>
<td>1:500,000</td>
<td>1929</td>
</tr>
<tr>
<td>Mineral claims: Mayo Dist., Yukon Territory</td>
<td>1:16,000 &amp; 1:3,801,600</td>
<td>1928</td>
</tr>
<tr>
<td>Eurasia (Wenchow)</td>
<td>1:6,000,000</td>
<td>1926</td>
</tr>
<tr>
<td>Geologic map of California</td>
<td>1:750,000</td>
<td>1916</td>
</tr>
<tr>
<td>Geologic map of California</td>
<td>1:750,000</td>
<td>1916, 1929</td>
</tr>
<tr>
<td>Butte County, Calif.</td>
<td>1:120,000</td>
<td>1901</td>
</tr>
<tr>
<td>New York &amp; its environs</td>
<td>1:63,360</td>
<td>1928</td>
</tr>
<tr>
<td>Coeur D'Alene Mines, Idaho-Montana</td>
<td>1:32,000</td>
<td>1924</td>
</tr>
</tbody>
</table>

DUPLICATE MAPS AVAILABLE

The foregoing list of duplicate maps is offered free by the University of California, Davis. Preference will be given to those enclosing self-addressed mailing labels.

Send requests to:

David Lundquist
Map Collection
Shields Library
University of California
Davis, CA 95616

UNIVERSITY OF OREGON, Map Library, Eugene, OR 97403. ATTN: Susan Trevitt-Clark has available 249 quadrangles, 15 & 30-minute, pre-1930, mixed U.S. states. First come, first served.

__________________________________________________________

YALE UNIVERSITY LIBRARY, Map Collection, 1603A Yale Station, New Haven, CT 06520 Postage reimbursement requested. * sheet nos. available on request.

U.S. Hydrographic Charts, 324 sheets; Army Map Service, 144 sheets.*
General Staff (U.K.), sheet no. 4184, Sumatra; sheets I-X, Netherlands East Indies; Army Air Force, 118 sheets*; Spoorne Tramwegkaart van Java en Madoera, 1:1,000,000, 1909; Residentie Wester-Afdeeling van Bornéo, sheets II, IV, VII, IX, X, XI, XIII, XIV, XV, XIX (1896); Overzichtskaart van Java en Madoera, sheet V (1924); Overzichtskaart van Sumatra, sheets 9, 12-15, 17, 19, 21, 22, 24, 25-28 (1930); International Map of the World, 1:1,000,000, 11 sheets*; Service Géographique de l'Armée, 5 sheets* Service Hydrographique de la Marine, 5 sheets; Depot des Cartes et Plans de la Marine, 3 sheets; Atlas des Colonies Françaises, sheet no. XXIX; Ufficio Cartografico del T.C.I., sheets 73-74, 99-100, 103-104, 140-141, 160-161; Ministerio das Colonias, sheets for Baixo de Pinas, Cabo Verde, Guinea, Principe, Atlas Colonial portugues nos. 5, 6; Königl. Preuss. Landesaufnahme, Frankfurt, Dalmatia (with Bosnia, Hercegovina, and Montenegro); Marine AmT, nos. 351, 651.

Also available, ca. 1,000 Japanese charts, in Japanese, most of them dated in the 1920s and 1930s. Sorry, we cannot list more details on these maps.
MicroCartography

Larry Cruse

Sixth in a Series.

by

Map Section C-075p
University Library
University of California-San Diego
La Jolla, CA 92039 (714)452-3338

PRODUCTS

Depository Library Council

The Depository Library Council acts as an advisory committee to the U.S. Government Printing Office. The DLC represents almost 1,400 libraries involved in GPO's free, automatic distribution program. At their late-September meeting, 1980 population census publications generated much heat, and some light, for map microforms.

WAML member Sharon Anderson (Head, Documents, Maps, Microforms Dept., UC-San Diego), successfully lobbied for the Census micro mapping to be done on full-fiche at standard reductions for each urban set. Consequently, the maps should be easy to file, find, replicate, read, project, and will certainly be as geometrically accurate as is practical to accomplish. Presumably, like all other GPO Depository fiche, the maps will be done in the negative (if you want them to stay that way, diazo duplicate them; if you want positives, duplicate on silver, or vesicular film). If you want a set in your map collection, you should be able to acquire it easily for 5¢ to 10¢ per fiche on a fiche-to-fiche duplicator.

The only issue left undecided at the meeting was how to treat the colored census tract boundaries on the maps. In the 1970 reports, boundaries were done in dark green ink. When microfilmed, this color becomes opaque and obscures underlying information. So a "fix" is being studied. Alternatives might be to "screen the green" so it shows as a fine dot pattern, or use a pastel which will show up on diazo but not obscure other information, or superimpose a special black-and-white pattern where boundary information is needed. Since the Census Bureau is probably more experienced in the field of computer output microfilm mapping (COMMies as we call them) a solution should be accomplished easily.

One useful quality about these maps of which I was ignorant until last week is that they are the only regularly produced street map series which not only shows all street names but geographic coordinates, too.

Background on the regular Census Bureau mapping program (in contrast to these special Depository developments) is provided by three recent publications:

1. Census Geography (Data Access Description (DAD) No. 33, revised May 1979 SuDocs # C240/7:33/2). It includes the following table:
2. 1980 Census Update, issue No. 16, October 1980 (SuDocs C3.238/3:16,(p.8-10)), "Mapping Program for the 1980 Decennial Census". It reviews the maps described in the preceding table and announces the following changes for 1980: increased map scale, standardized symbolization, increased descriptors, and the use of metric, feet and mile scales.

3. Finally, there is the Census Bureau’s Monthly Product Announcement for April 1981 (SuDocs C3.163/7:981/4,(p. 13)) containing the following table:

MAPS
"1980 census maps showing block, tract, enumeration district, and place boundaries now are available. They do not show urbanized area boundaries but they do indicate some of the census designated places which may be deleted from the final 1980 census maps.

Currently these maps are only being sold on a package basis for individual States, standard metropolitan statistical areas (SMSA’s), and counties. Each package for an individual area may include any one or all of the following types of maps: 1) county, 2) place and vicinity, and 4) metropolitan/vicinity map series.

Listed below is the cost of diazo paper prints of the maps for each State and the District of Columbia. A $30 handling charge is to be added to each order. (WAML States only are shown here.)

Alaska - $902.10 Hawaii - $318.06 New Mexico - $587.76
Arizona - $1,153.20 Idaho - $656.58 Oregon - $1,021.14
California - $3,930.18 Montana - $812.82 Utah - $719.82
Colorado - $1,220.16 Nevada - $186.00 Washington - $1,089.96
Wyoming - $368.28
"For more information about specific maps, or for prices on SMSA or county maps in the series noted above, contact Customer Services (maps), at Data User Services Division, Bureau of the Census, Washington, D.C. 20233, or telephone 301/449-1600."

As everyone no doubt already knows, there was not enough money to publish the 1980 population census. As a stopgap, publication will be done on microfiche and sent to depository libraries by GPO. This includes about 15,000 maps accompanying the census "block statistics," a decennial street map extravaganza showing every major populated area in the U.S. (another set of maps continues this to show every populated place above 5,000 population). This will free enough money to publish the actual block statistics.

Some idea of the cost savings involved in this shift from paper to microfiche can be gleaned from the prices quoted above (see paragraph numbered 3). A complete national set of blue-line census maps on paper is $60,351.66 (the cost of all WAML States is $12,966.06). If the block statistics maps represent half of this total, they can be sent out for about $750 or less on micro, at a savings of roughly $29,000 per set. Blue-lines can then be generated locally from the micros for 2¢ to about 20¢ per square foot on library reader printers.

While a published version of these maps is still promised, to be included in the relevant reports when they are released, they will no doubt remain in the dollar-a-sheet price range, if not more. The acquisition of full U.S. coverage of 60,000 census maps would require about 16 cases and 272 square feet, or, in dollars, about $60,000 for the maps, $24,000 for the cases, and $34,000 for a place to put them (using a formula of 250 maps per drawer in a 15-drawer Hamilton map case which costs at least $1,500 and occupies more than 17 square feet at approx. $125. per square foot). In micro, it works out to $1,500 for the maps, $2,000 for a cabinet, and $377 for the floor space. That's $118,000 versus ca.$4,000, leaving $114,000 to pay for a microfiche reader and/or reader printer and perhaps a few spare bulbs.

A more practical way of looking at it is to realize that for an outlay of $75 per year for the next ten years, you can keep up with complete street mapping of all significant population centers in the U.S. Double that figure and you can have a street map of every place of 5,000 or more population in the U.S., updated every ten years. With them, you can make legible fiche-to-fiche duplicates (or get them from others if your's are lost, misfiled, etc.). With the fiche you may blow-back portions of the map to almost any size you want (back to full-size would be about $12 for the largest maps, a figure to be doubled if you want Mylar -- this is competitive with commercially available Mylar -- it can be done on a demand basis with no anticipation of user needs anymore-- or make your own copies on Xerox's new model 740 (about $5,000 with its coin box) which will make an 8½" x 11" Mylar or paper copy.

Geographic Names Information System

NCIC is producing its state gazetteers on COM fiche, with a minimum of two fiche needed per state. Thirteen have already been released (Colorado, Connecticut, Delaware, District of Columbia, Indiana, Iowa, Kansas, Maryland, Nebraska, New Jersey, North Dakota, Washington, Wyoming). Sixteen more are in the works and the remainder will be done along with the printed versions. The current crop of 29 states is available for $43.50. Orders can be placed through NCIC, 507 National Center, Reston, VA 22092. Be sure to specify micro edition.
Library of Congress

LC's photoduplication service planned at one time to make up a list of all the atlases they microfilmed for the G&M Division. Even though the list was never compiled and probably never will be, it might interest you to know that G&M has had over 500 of their "vault atlases" microfilmed as a preservation measure, over 200 of them in the last year alone. These can be duplicated by the Photoduplication Service for $11.00 ($10 minimum order and 40¢ for a spool). Their regular rate is 15¢ per foot of 35mm film — at about six images per foot — or 66 images for the first $11, and .15¢ per six images thereafter. For a listing of the atlases, consult LC's National Register of Microform Masters — better yet, don't; wait until we can find someone willing to draw up a separate list. The National Register (author entry only) is a bit too daunting, but you might want to consult it in special cases.

Aerial Photography Micro(graphic) Index

The USGS (NCIC-EROS Data Center) graphic index to aerial photography consists of an expandable series of microfiche containing microphotographs of actual air photos. The set is arranged in a nested fashion based on the 52 4° x 6° International Map of the World quadrangles touching on the contiguous U.S. These are then subdivided to as many as 12 1° x 2° subsets based on the 1:250,000 mapping. The final subunits are the 15' and 7.5' quadrangle-based "blocks". (*Nomenclature: a microphotograph is something large photographed small; a photomicrograph is something small photographed large.)

Microfiche headers are color coded to telegraph film types: red for infrared; white (actually clear) for black-and-white; and blue for color. They also carry filing information to relate date, place, agency and gross scale ("S", "M", "L").

Each microfiche then, literally, displays the actual photographs for its respective area and time and/or it contains the proper map or flightline index, and a tabular listing describing photo characteristics. Along with the set is a pamphlet (3rd edition, January 1981) that describes the set contents and gives detailed instructions on alternative means for filing, including a point-by-point evaluation of relative trade-offs inherent in the alternatives suggested: for instance, tossing the entire set in a microfiche cabinet is cheapest, but hardest to use; carousel files are most expensive, and binders with fiche carrier panels are a good compromise.

With only the utmost difficulty have I been able to find that salve of a critic's pride, a possible improvement. Niggling and minor, its advantage is increased filing coherence. At the outset I mentioned that the set was IMW-based, at least that's the shipping sequence. Unfortunately, the sets and subsets use quadrangle name identifiers rather than the immutable IMW alphanumerics. Because of this choice, while each set is packaged in nested, IMW fashion according to the alphanumerics and 1:250,000 scale subsets, it looks to be in an unalphabetical mess and the instructions suggest that you arrange it. A sheet name used for the 4° x 6° IMW quadrangle, such as "Los Angeles", is also repeated for one of the 12 1° x 2° areas, which is confusing: there is no way to tell from the header which is which. To overcome this handicap, we have labeled our fiche holders according to IMW designators and filed subsets in IMW order. Thus, the 4° x 6° fiche for Los Angeles is NI-11; the 1° x 2° fiche for Los Angeles is NI-11-4. Since this amendment is also consistent with the packing order of the fiche themselves, it is an easy matter to find the proper fiche. We have also added small printed index sheets to each of the fiche panels as visual reinforcement of the area covered by the fiche on that panel.
With those two improvements, the system is as foolproof as possible. Unfortunately, there is no way to correct the headers on the fiche, short of adding IMW designators to each header by hand! This process is irreversible, so be careful! (* see Joseph J. Ulliman and Oliver J. Grah, Marking Pens for Aerial Photographs and Transparency Material, Photogrammetric Engineering and Remote Sensing 47(4):501-504, April, 1981; or try any micro supply house for fiche marking pens—they're available in colors.)

When weighed against the essential merits of the set, the indexing problem pales to insignificance. How did we ever get along without this index? If no one else does it, map librarians should band together and award the National Cartographic Information Center and EROS Data Center a wholly new prize for this brilliantly conceived and almost perfectly executed visual index. Coincidental with the arrival of our "Los Angeles" (NI-11) microfiche, I was cataloging as best I could some air photos using the Aerial Photography Summary Record System (APRS) in microform, the strictly tabular type of listing we have relied on in the past. After what seemed like hours of unfamiliar fiddling, I found the proper listing; actual use time was probably about thirty minutes. The same exercise using this new micro(graphic) index was nominal in the literal sense; time was only spent getting the fiche right—reading on our viewer. Then, presto and voilà, I was viewing absolutely the same photograph I had in hand, could tell the areal extent of the set if was a part of, and further, could count, if need be, the number of photos in the mission. People have constructed shrines to less remarkable accomplishments than this one by NCIC.

And the set is almost dirt cheap. We paid $55 for complete, modern coverage of the very busy "Los Angeles" quadrangle which covers all of southern California as well as adjacent portions of Arizona and Nevada on ca.300 microfiche, at a little more than 18¢ per fiche. Whatever recognition is contra to Senator Proxmire's "Golden Fleece Award", this index deserves it on cost savings alone: for its utility; for its quality (many users will be able to get by with the fiche alone, so good is the resolution); for reducing frustration and errors all along the line (ordering mistakes will be as rare as hen's teeth); and for providing an index that will always be available—so even if it's five years before you need these, you can still count on getting them.

Even if you do not want the micro now, the accompanying pamphlet, Aerial Photography Micro(graphic) Index: Organization and Use, should be acquired without delay. It is informative in its own right. One follow-on/intermediate product we could sure use is the actual air photos individually produced on microfiche, either half of each photo per fiche at near full-size, or just the entire photo at half size on a fiche. Of course, a similar index and collection would be welcome for satellite photography, too. At less than 20¢ each, or even at $1 each if necessary, such remote sensing would be within reach for all libraries, and the public at large. It could be produced by subscription. It would fill a large gap which now exists. Perhaps the successful reception accorded the micro(graphic) index can serve as a necessary first step; although, whether or not it is ever supplemented, it will always stand as a microcartographic tour de force.

The Aerial Photography Micro(graphic) Index is available from the EROS Data Center, Sioux Falls, South Dakota 57198.
EQUIPMENT

In last June's installment of this column, I discussed the Bell & Howell and Northwest Microfilm 35mm roll film readers. Along with a clutch of other machines, the same readers were reviewed simultaneously by (the marginally more authoritative) Library Technology Reports (Vol. 17, No. 4 June/July 1981). Reassuringly, they came to similar conclusions, based on evaluations and manufacturer's responses, which you should not miss reading. While the evaluations are saving you from grief, the manufacturer's rationalizations and back-biting lend credence to the expression "let the buyer beware".

One aspect of particular concern is the typical American assumption that engineers will design-in enough safety to protect us from ourselves. Not only do the designers of foolproof equipment underestimate the ingenuity of fools, but, as LTR relates in one example, the "new and improved" Bell & Howell Mark II reader was less satisfactory than its predecessor in some ways (e.g., it had a potentially lethal design flaw (since corrected, the manufacturer claims, but not completely eliminated, as it could have been)). Nor does Northwest Microfilms get off scot free; seems they placed the film advance hand crank in such a way that user's knuckles would inevitably get bruised (also retro-correc ted, the manufacturer claims).

On the other hand, in the same LTR issue the IMM "Superior" A-B microfilm reader is enthusiastically reindorsed. While the indorsement is deserved, for the most part—we have a number of these roll-film readers and they are great, rarely causing any mechanical problems. However, they were designed with an exposed mirror placed above the user's forehead. Resting on pivots, it can be moved manually both to change magnification and to tilt the image. We had one incident where one of these mirrors fell out of its cradle and broke right in front of the patron. Even though the manufacturer sent out a retro-fix for the mirror holder in response to our description of the accident, the near-disaster led us to replace all of the glass first-surface mirrors with acrylic plastic substitutes.* The consequent reduction in optical clarity (10%?), which was not apparent in our casual tests, was more than outweighed by our sense of relief. A further irony in this was that last week a bolt worked loose from the mirror mount (made of wood because of the former glass mirror?), proving that, even with the manufacturer's retro-fix, we still might have had a patron dangerously exposed to a shattered mirror—with the acrylic, neither the mirror nor the patron is in imminent danger. We just glued the bolt back in and forgot about it. Unfortunately, LTR has yet to anticipate this problem in their tests. As for what will become of the first-surface glass mirrors, keep reading.

(* First surface mirrors have their silvered coating on the face of the glass, unlike mirrors used in the home where it is placed on the back; consequently, light striking first surface mirrors is not weakened or distorted by travel through glass. Acrylic mirrors use plastic instead of glass. Reflectance is accomplished by glueing highly polished aluminum foil to the back side. They are visibly less reflective than glass mirrors but absolutely unbreakable.)

The fact that LTR did not anticipate a design weakness in one instance in no way reduces its credibility: when it comes to trouble shooting hardware, we need all the help we can get. LTR has already covered, or probably soon will cover, any hardware you are likely to buy for your library. It is always well worth reading, but it should serve to raise your critical faculties, not replace them.
Portable Readers

The May/June 1981 issue of LTR (Vol. 17, No. 3) reviewed most of the contending portable microfiche readers now on the market, carefully noting the temperatures each impinged on the microfilm. Most of the equipment threatened or exceeded the optimum high temperature threshold, something you might assume designers could get around. Fact is, they could; it is also a fact that they did not, in most cases. At which point you, too, might want to introduce some home-grown improvements equivalent to the mirror substitution we made. In this case, it might consist of replacing the standard glass flats with special heat-absorbing ones, unless you can get the manufacturer to do it for you (and us) on all units. While such a design compromise (high temperature) might not directly imperil users*, it does age film faster and perpetuates irresponsible design. On the other hand, there are applications where film is often replaced on a monthly basis anyway, so such a reader in its standard configuration would pose no problem. But at least, LTR is there to warn you. (*I have yet to see a toxicity study of the fumes released when film is maintained at too high a temperature, but I have my man on Krakatoa working on it.)

Hand Held

Yet one other recent source for review of reader equipment is Britain's National Reprographic Centre for documentation (NRCD). It recently released a study entitled: "Hand Held Viewers for Microfiche and Aperture Cards". It is available from its offices at The Hatfield Polytechnic, Bayfordbury, Hertford, Hertfordshire, England SG13 8LD, at £8.50 hardcopy or £3.00 microfiche; the publication number is (TER 81/1).

Not having actually seen this report yet, which I will discuss in a later issue, I mention it here to round-out our list of reader evaluations—stationary, portable, and hand held.

As for the NRCD, it is a unique institution in the microfilm industry, always poking around, doing something meaningful. It was its report, A technical appraisal of the 70mm format for map reproduction, in 1968 that once-and-for-all established the minimum format standards for map microforms and is the principal reason that 105mm is the preferred size for map preservation and replication. Its conclusions will probably not be outdated so long as glass lenses are used in photography.

The Pacific Southwest Forest & Range Experiment Station (Model 1)

MODEL 1: If, like me, you are a bargain-basement type, you could hardly do better than to read USDA Forest Service Research Note PSW-277, 1972, which describes a "Projection-Viewer for Microscale Aerial Photography", by Robert C. Aldrich, James von Mosch and Wallace Greentree. You will learn all of the fundamentals needed to design your own reader (theirs could even be altered to work using sunlight). Excepting the light source, for a net outlay of about $130 (that's right, one hundred thirty dollars!), the Berkeley Boys made a viewer which will handle everything up to 3 ½" x 4" transparencies, will project them on a calibrated 20" x 20" screen which can be used to draw maps, etc. Remember that! - the next time you look at microfilm equipment prices. The principles they discuss could just as easily be tailored to fit 4 x 6-inch microfiche projected on a screen of any size, although 20 x 20 inches is considerable. The fact that their light source projector was probably expensive to buy and their finished product is (at best) ungainly, should not deter imitators: they worked with what they had, as can anyone else, using available components. For instance, I've been saving those first surface microfilm reader
mirrors and some old, crazed microfiche reading screens. As soon as I get some fasteners, an artist's easel and a few more bits and pieces, overcome my preternatural fear of electricity (UL will take on new meaning), there is no telling what may be at hand.

**Grayscale Labs**

One subfield of microfilm currently undergoing a healthy expansion is that devoted to medicine. While much of it is content to use microfilm in conventional ways, X-ray microfilming is hindered to cartographic microfilming in interesting ways: like 7.5' quadrangles, most X-rays are taller than wide, which has led Grayscale Labs (Grayscale Labs, Inc., 2115 Northwest Parkway, Marietta, Georgia 30067, telephone 404/953-1431) to engineer some interesting equipment, in addition to their specialty of processing continuous tone microfilms. Their current reader, the CTR II, is intended for use with 16mm and 35mm images on fiche, has a 17½" x 14½" (44 x 37 cm.) screen and options including image rotation and a roll-film holder. Lenses are housed in a circular turret and include dual image 6X (might work for stereo-pair air photos), 11X, 15X, and 21X magnifications, completely variable brightness control—with a momentary high-intensity spot—and choice of blue or gray screens. Price ranges from $1,460 (one lens) up to $2,275 (includes 4 lenses & motorized roll-film advance). Their CTR/P is a similar reader/printer (with but one lens) designed to make transparencies on 14" x 17" radiographic duplicating film; but I’m sure there are some other Kodak films which would work, too, such as Precision Line Film LEN4 (Kodak Tech Bits 1978 Volume No. 2), or Rapid Access Mapping Film SO-340 for continuous tones (The Compass No. 3, 1981:14). The CTR/P has a base price of $2,859 and ranges up to $3,409 with power advance. Yes, that is the **high priced spread**; but it may be just the configuration you are looking for, in which case, it might not seem too expensive at all.

**IMTEC IMS 105**

The Intec IMS 105 electrostatic, full-fiche reader/printer is a new offering by the manufacturer of what was the only 105mm reader/printer in the early 70s. This is (apparently) a variant of the Intec 2000 marketed through K+E. Both share an 18" x 24" viewing screen and like-size printer. Base price is also ca.$20,000, admittedly high, but prints are via the least expensive process possible, electrostatic. Typically, electrostatic plain paper prints are about .021¢ per square foot, while printers using special photosensitive papers will range from about 11¢ each for zinc oxide to 20¢ each for dry silver, and the spread may be even higher than that, depending on wastage.* Wastage can be especially high for silver processes because the exposure settings are very sensitive. So, as things stand now, you can pay high prices at the front-end with electrostatic equipment, then depreciate it, or, pay low front-end expense for the others, but make up the difference over time with more costly supplies. It seems apparent, too, that library's will bear the major burden with electrostatics, or patrons will bear it with higher copy prices for coated papers. One difference is that with electrostatics, the library can have more latitude to decide how the costs will be born. Of course, consideration should also be given to the nature of the material to be copied. While some electrostatics can do a very good job with continuous tone photographs (Kodak seems especially good at it), no electrostatic will make copies approaching those made on top-of-the-line dry silvers. Thus, if you will be doing extensive air photo microcopying, you should consult with 3M; for line maps, see IMTEC, Oce, K+E, or Xerox. (* Based on a local Xerox study consistent with our own experience at UCSD.*)
For further information on the IMS 105, contact IMTEC Equipment, Inc., 24 Wilkins Ave., Haddonfield, NY 08033, (609)428-2633. A small photo of the unit appeared in Drafting and Repro Digest 10(5):32, October 1981; it looks just like the Intec 2000 K+E dealers have been distributing for some time.

Resurgence of 105mm reader/printers is a welcome relief, even if their prices are not. It implies that the format is seeing more use in the architectural and engineering communities, as well as in mapping. (See Ray C. Carden, "A case for replacing the 35-mm aperture card with the 105-mm fiche", Journal of Micrographics 14(10):35-37(October 1981)).

3M

If it's design breakthroughs you want, consider 3M's new model "283". About the size of an IBM Selectric typewriter, this paper-to-paper copier is the first I've seen to feature fiber optics, no mirrors or lenses and only a 30-watt light source. When they do the same for 105mm reader/printers, much of the bulk associated with the full-fiche format should disappear.

Filing Systems

The past two issues of this journal have contained articles dealing with the problem of filing systems for large map series, each partly critiquing a third: that proposed by the USGS for its mapping as introduced on the prototype Ohio state index.

But no one's reading is complete until they include Renato Goes De Azevedo's "International Cartographic Rules for the Demarcation of the Earth's Surface" (Journal of Micrographics 12(5):301-303, May/June 1979). Of course, having read it myself, I don't know whether to suggest you laugh or cry at such designators for 1:25,000 mapping as SD-23-y-C-IV-3-NW, and I think you should disregard the fact that he maintains that the IMW quadrangle numbering starts at Greenwich (it starts at the International Date Line for the very good reason that if it started at Greenwich, adjacent land areas in Britain would appear at the beginning and end of map sets, rather than in orderly succession), and ignore the various typos, too. Otherwise, the first principles seem well drawn, especially in a general map library; the USGS may be content with a provincial system, but map libraries dealing with worldwide mapping need an international one. Using USGS's proposed 1° x 1° grid gives too many quadrangles. The already well established IMW system, with its 4° x 6° squares, seems much more practical. Since most regular series mapping falls on even degree lines, this seems the most logical system. It remains then, to make the large scale map indexing coherent, based on AMS mapping precedents. Or, perhaps, IMWs can be superimposed on the various local systems, to bring at least a degree of nested conformity to them. Since 1:250,000 U.S. mapping already has IMW numbering, and 1:100,000 nests in it easily as NE, NW, SE, SW, it only remains to nest larger scale series in that. Should be easy enough!

A second motive for reading this article might just be that you have an interest in maps of Brazil on microfiche. If you prefer to wait, I'll have more about the products of Sensora Ltda. of Brazil in a later article.

Color Microfilm

As each new generation of microfilm users ascends its learning curve, there is renewed interest in the obvious need for color microfilms. This is especially true amongst map and art librarians; color is an intrinsic part of both disciplines. In response, the issue is addressed periodically by a micro-
form professional. The latest of these exercises is Claude Goulard's "Color Microfiche: Myth or Reality?" (IMC Journal 1981 (3):11-13).

Truth to tell, no breakthrough is at hand. Color film is still inferior in resolution and longevity, and the recommendation still persists: if you want durable color microforms, black-and-white separations are the only way to attain them. This is exactly the method used for Landsat 70mm photographs, which is both good and bad. While it is too bad this is the only means available it is good in that there is no standardized production method standing in the way of creating a systematic approach to the problem. My favorite potential fix is still the idea of the embossed microform, which depends on the precise diffraction of light to create colors synthetically. It is based on the tendency of spectral diffraction to bend the color components of white light by predictable amounts. Consequently, if the microform is embossed properly, it will reflect the intended color to the viewer, and only that color. With such a system, color separations are made on pre-embossed-for-color microforms in such a way that the color projects through only where intended. Sandwiching four such separations together (red, yellow, blue, and a black/white component) will yield a full-color, indestructible microform.* Such a microform could then be printed out as a full-size map on Xerox style copiers, such as those being developed for the U.S. Army.


But what do we do in the meantime? There are many good reasons accumulating for taking a more pragmatic approach towards the problem. For instance, one of the traditional arguments against color microforms is their great expense. Like all other opinions in microform circles, this is addressed toward the average user. However, map libraries are dealing with almost nothing but special cases. What if, as commonly occurs, in spite of its great expense, a color microform should prove cheaper to buy than the paper edition of the map? Added to its cheaper storage costs and its 25-50 year shelf life—as compared to paper’s 100 years—would it not make sense to consider the microform? Even if it will have to be replenished every 25 years on average, would it perhaps be worth while? And, even if it were expensive to replicate—say $2 per microfiche positive—would certain professional users be willing to bear the expense? Would it matter too greatly if the colors were not absolutely faithful (I have yet to see two maps printed from the same series which had perfect color match and no one seems too worried about that), so long as the colors on the key and the colors on the maps were the same shade? Might there not be situations in the field where such a microform would even have certain advantages, provided it was protected sufficiently from the elements?

Geologic mapping might be one possibility. Another might be those high-priced or impossible-to-get map series you've always wanted. We could come up with a stupendous list just using the latter two categories. Remember when GeoCenter offered copies of 1:50,000 scale AMS maps of Eastern Europe? The sheet price on these maps approached $4 each in incomplete sets; how many would be interested in a complete set at $2 per sheet on color microforms? Yet another instance is the current double difficulty in obtaining Mexican mapping. With a base price of $5 per sheet and undependable supply, would a $2 color
microform and certain delivery not make more sense? Mexico is comprised of
about 2,300 quadrangles at 1:50,000, with separate series for topography,
soils, land use, geology, and potential use. Cumulatively, that amounts to a
$57,500. outlay for the complete paper collection; the same maps, but in color
microform, would run $23,000 - for a net savings of $34,500. Of course few of
us deal in budgets this big, but, cumulatively, and perhaps selectively, our
predicament amounts to the same thing.

Between here and there, of course, it would be necessary to establish a
few baselines. It would not do, for map librarians to develop the compulsive
habit of limiting user's viewing time; and consider the record keeping neces-
sary to log use-time on each microform, to give some sense of what to expect
in the way of longevity. It would require some sort of formal organization
willing to preserve the paper original of a map, and to maintain cold storage
of the master negatives (at least two or three would be necessary). We are not
at that stage yet, obviously, but those willing to tackle studies of user in-
terest along those lines are more than welcome to use these pages as a forum
for such ideas. Meanwhile, you might find it useful to read Harold H. Dorfman's
"Color Microfilm Records" (The Office 83(4):18-19, 189, April 1976). He de-
tails those cartographic circumstances where color microfilm is justified for
the City of New York. He also gives you a sense of what you might be getting
into.

Cold Storage

One essential in the battle to preserve color films is cold storage. The
American Film Institute (John F. Kennedy Center for the Performing Arts, Wash-
ington, D.C. 20566) and the Library of Congress co-sponsored a conference on
the topic last April. The Proceedings: Conference on the Cold Storage of Mo-
tion Picture Films is full of helpful information based on the experience of
leading institutions in North America and Western Europe. Copies are available
free from Mr. Joseph G. Embsuch, Associate Motion Picture Archivist at the
American Film Institute. Any library with a preservation program liable to in-
clude film—especially color film—should have a copy.

4,287,152
METHOD OF FOR RETARDING DYE FADING DURING
ARCHIVAL STORAGE OF DEVELOPED COLOR
PHOTOGRAPHIC FILM
Richard B. Hoover, and Charles M. Rhodes, both of Huntsville,
Ala., assigns to The United States of America as represented
by the Administrator of the National Aeronautics and Space
Administration, Washington, D.C.
Filed Feb. 7, 1980, Ser. No. 119,340
Int. Cl. B01J 19/14, 19/00
U.S. Cl. 422—40
6 Claims

1. A method for retarding dye fading during archival storage
of developed color photographic film comprising the steps of:
(a) placing the film in a sealed opaque vault;
(b) venting the vault;
(c) introducing a dry, pressurized inert gas into the vault
while the latter is vented; and
(d) sealing the vault after the air in the vault is purged and
replaced by the inert gas.
New Mapping of Western North America

Contributions by:

MB = Mary Blakeley, University of Arizona, Tucson
BC = Barbara Cox, University of Utah, Salt Lake City
JC = Jim Coombs, Southwest Missouri State Univ, Springfield
LC = Larry Cruse, University of California, San Diego
ML = Mary Larsgaard, Colorado School of Mines, Golden
RM = Riley Moffat, Brigham Young University, Provo, Utah
EP = The Editor, from Publisher's blurbs & items in hand

Regional


Overthrust Belt Study Area, Idaho - Utah - Wyoming, s.l., 1979.

RM
7 maps 83 x 42 cm. 1:500,000 Overlays show past and present mineral production locations; leasable mineral areas, locatable mineral areas, wilderness systems, federal oil and gas lease, federal mineral estate.


RM
7 maps 112 x 83 cm. 1:500,000 Information dated 1979. Overlays show federal mineral ownership, wilderness system, locatable mineral prohibited and restricted areas, leasable mineral prohibited and restricted areas, federal oil and gas leasing, mineral industry locations.

¶ U.S. Forest Service.


OCLC: 7014545

¶ U.S. Forest Service.


48 x 60 cm. 1:500,000 free USDA, Forest Service, Rocky Mountain Region, Denver Federal Center, Building 85, Denver, CO 80225. GPO Depository no. A13.28.082/2. Shows coal lease and lease application areas.

¶ U.S. Forest Service.


U.S. Forest Service.


JC


U.S. Forest Service.


JC

122 x 96 cm. 1:126,720 free Forest Supervisor, P.O. Box 520, Medford, OR 97501. GP0 Depository No. A13.28;R63. Includes charts showing details of each sale. OCLC: 7189908

U.S. Forest Service.


JC

105 x 95 cm. 1:126,720 free Forest Supervisor, Grants Pass, OR 97526. GP0 Depository No. A13.28;Si8/2. Includes charts showing details of each sale. OCLC: 7184679

U.S. Forest Service.

**Toiyabe National Forest, South Sierra Division, Nevada and California.** Washington, D.C., 1980.

JC

67 x 72 cm. (Printed on both sides of sheet.) 1:200,000 free Forest Supervisor, P.O. Box 1331, Reno, NV 89504. GP0 Depository No. A13.28;T57. Compiled in 1969. Includes text, col. ill., vicinity map, and recreation site directory. OCLC: 6732111

Arizona

Arizona Department of Transportation


MB

90 x 60 cm. 1:1,000,000 free Arizona Office of Tourism, 1700 West Washington Room 501, Phoenix, AZ 85007. Includes mileage chart, index to cities and towns, city maps of Phoenix, Tucson, Yuma and Flagstaff.

City of Tucson, Department of Transportation

**City of Tucson traffic volumes.** Tucson, April 1981.

MB

59 x 89 cm. $2.00 City of Tucson, Traffic Engineering Division, P.O. Box 27210, Tucson, AZ 85726. Inset: Central Business District.

Molner, Robert

**Molner map of Arizona.** Phoenix, 1981.

MB

129 cm x 103 cm. $10.95 Arizona Map Shop and Gallery, 1315 North Central Avenue, Phoenix, AZ 85004. Accompanied by an index to cities and towns. List of points of interest.
Phoenix Mapping


100 x 143 cm. $28.00. Phoenix Mapping, 1320 North 1st St., Phoenix, AZ 85004. Accompanied by street index.

U.S. Bureau of Land Management


66 x 58 cm. 1:1,000,000 66 GP0 Depository No. 153.11:W64

U.S. Forest Service

Coconino National Forest, Arizona. {Albuquerque, NM?}, 1981.


U.S. Forest Service


California

California Division of Mines and Geology


146 x 122 cm. 1:750,000. Free on GP0 Depository No. C55.22/2;C12/no. 4

Includes data on individual springs and wells, and Imperial Valley inset. OCLC: 7493309 or 7565682. Also available from California Division of Mines and Geology, 2815 O Street, Sacramento, CA 95816.

San Francisco Convention & Visitors Bureau


40 x 23 cm. ca. 1:20,000 for Downtown, ca. 1:55,440 for city map. Tourist brochure, folded to 23 x 10 cm. Text and Points of Interest keyed to map. Free {author}, 1390 Market St., San Francisco, 94102

Sanborn Map Company

San Francisco Maps: 1899-1900. A compilation of over 700 maps, microfilmed at the Library of Congress expressly for Vlad Shkurkin, Publisher.

1 roll 35mm black & white microfilm containing six volumes published over a two-year period. Reduction about 16:1. Frame size is about 1.87 inches and sufficient margin is provided for jacket or aperture mounting. ISBN 0-932732-22-4. $80.00 Vlad Shkurkin, 6025 Rose Arbor, San Pablo, CA 94806. Phone (415) 232-7742.
Visitors Stumble Into ‘War Zone’

Misleading Tourist Maps Worry Police

SAN FRANCISCO (AP) — Police say they are worried that tourist guide maps are setting up tourists as mugging targets in one of the city’s most crime-prone neighborhoods.

The maps, highlighting points of interest in one of the world’s most visited cities, lead sightseers through a public housing complex in the city’s Western Addition on their way between the downtown area and Golden Gate Park. The distance is actually two miles but on the maps it looks like a mere four blocks.

“Going in there is like going into a war zone,” commented one officer. “And sending some innocent tourist in there thinking he’s out for a walk to Golden Gate Park is like turning a kitten loose on the freeway.”

The maps are “somewhat misleading and may jeopardize the safety of visitors to our city,” added Police Chief Cornelius Murphy.

There were 75 street assaults reported in the neighborhood last month, police say. And, although map makers report having received no complaints from tourists, officers say robberies in the area are up dramatically over the same period last year.

Murphy has become so concerned about the potential for tourist muggings that he asked one of the map companies, Color Coded Publications, to modify its product.

But John Benus, editor and publisher of Color Coded, said he does not think many people walk through that area, and he does not intend to change his maps. Officials of another map company, Tourmap Co of Spokane, Wash., said they are in the process of reprinting their San Francisco maps to include a warning that some areas are unsafe for walking, and that distances may be distorted.

A spokesman for the city Visitors and Convention Bureau said maps from the two companies are distributed only on request and then with a warning that they are not printed to scale. The bureau has its own maps with a more accurate depiction of distances.

[The San Francisco Chronicle, on Oct. 19, 1981, in a related story printed its own map on this subject - crime on the streets of San Francisco - and had an accompanying article citing the statistics.]

See map on next page!

SF maps lead tourists to muggers

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Most Dangerous Streets of the

{San Francisco Chronicle 10-19-81}

S.F. MUGGINGS

STREET ROBBERY, STRONG ARMED ROBBERY AND PURSE SNATCHING

JAN. TO JUNE 1981

San Francisco muggings, by police district, in the first half of 1981

Santa Barbara Office of Public Works

{Bicycle map of Santa Barbara and vicinity} as described in the July 1981 issue of Sunset Magazine, p. 5: A new map outlines all the bikeways in Santa Barbara and neighboring Goleta and Carpinteria. For a free copy, write to or drop by the office of Public Works - Bicycle Program, 630 Garden St., Santa Barbara 93101.

The map also points out where you can catch the Bike Bus....

Southern California Economic & Job Development Council

{Southern California industrial land} as described in the September 21, 1981 Fortune Magazine (Vol. 104, No. 6): A four-color map of Southern California with a detailed drawing on the reverse side showing the industrial land areas of one of the 10 counties (Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara or Ventura) is available for $3.50 for each map (or $31.50 for a set of all 10) to: Southern California Economic & Job Development Council, 404 South Bixel Street, Los Angeles, California, 90017.
### 1980 Census Maps & Materials

<table>
<thead>
<tr>
<th>Census Tract Outline Maps &amp; Overlays</th>
<th>Area Covered</th>
<th>Size</th>
<th>Year Issued</th>
<th>Unit Price</th>
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<tbody>
<tr>
<td>Shows the boundaries of the Tracts &amp; the Tract numbers in easy to use form.</td>
<td>Map: Northern Ca. 8 Co's &amp; Sac.</td>
<td>30&quot;x42&quot;</td>
<td>1980</td>
<td>$15</td>
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<td></td>
<td>Overlay: Northern Ca. 8 Co's &amp; Sac.</td>
<td>30&quot;x42&quot;</td>
<td>1980</td>
<td>30</td>
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<td></td>
<td>Map: San Fran. Bay 13 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1980</td>
<td>$15</td>
</tr>
<tr>
<td></td>
<td>Overlay: San Fran. Bay 13 Co's</td>
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<td>Overlay: Central Ca. 8 Co's</td>
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<td>1980</td>
<td>30</td>
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<tr>
<td></td>
<td>Map: L.A. 5-Co. Area</td>
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<td>1980</td>
<td>$15</td>
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<tr>
<td></td>
<td>Overlay: L.A. 5-Co. Area</td>
<td>30&quot;x42&quot;</td>
<td>1980</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Map: San Diego-Imperial</td>
<td>31&quot;x36&quot;</td>
<td>1980</td>
<td>$15</td>
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<td>Overlay: San Diego-Imperial</td>
<td>31&quot;x36&quot;</td>
<td>1980</td>
<td>30</td>
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<tr>
<td></td>
<td>Map: Rest of So.Ca. 3 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1980</td>
<td>$15</td>
</tr>
<tr>
<td></td>
<td>Overlay: Rest of So.Ca. 3 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1980</td>
<td>30</td>
</tr>
</tbody>
</table>

### 1980 Census Tract Guides

A listing of Census Tracts, showing:
- the legal jurisdiction, the P.O., the Zip Code, the Statistical Area, the Map Grid Index on our Maps, the Thos. Bros. Map Location, the Acreage, and an indication if the Tract was split since 1970.

<table>
<thead>
<tr>
<th>Area Covered</th>
<th>Size</th>
<th>Year Issued</th>
<th>Unit Price</th>
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<tbody>
<tr>
<td>Northern Ca. 8 Co's</td>
<td>6 Pages</td>
<td>1981</td>
<td>$25</td>
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<tr>
<td>San Fran. Bay 13 Co's</td>
<td>40 Pages</td>
<td>1980</td>
<td>50</td>
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<td>Central Ca. 8 Co's</td>
<td>13 Pages</td>
<td>1981</td>
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<td>San Diego-Imperial</td>
<td>12 Pages</td>
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<td>Rest of So. Ca. 3 Co's</td>
<td>7 Pages</td>
<td>1981</td>
<td>25</td>
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### 1980 Census Tract Numbers

A listing of all 1980 Census Tract numbers in numerical sequence by Counties.

<table>
<thead>
<tr>
<th>Area Covered</th>
<th>Size</th>
<th>Year Issued</th>
<th>Unit Price</th>
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</thead>
<tbody>
<tr>
<td>All Ca. 38 Tracted Co's</td>
<td>15 Pages</td>
<td>1980</td>
<td>$35</td>
</tr>
</tbody>
</table>

### 1980 Population & Race Data

A print-out of the first official re-apportionment data by Tracts. Shows for each Census Tract:
- the Total Population;
- the White Population;
- the Black Population;
- the Spanish Population;
- the Asian Population;
- the Indian—Eskimo Population; and other Races.

<table>
<thead>
<tr>
<th>Area Covered</th>
<th>Size</th>
<th>Year Issued</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Ca. 8 Co's</td>
<td>150 Tracts</td>
<td>1981</td>
<td>$20</td>
</tr>
<tr>
<td>San Fran. Bay 13 Co's</td>
<td>1,500 Tracts</td>
<td>1981</td>
<td>40</td>
</tr>
<tr>
<td>Central Ca. 8 Co's</td>
<td>170 Tracts</td>
<td>1981</td>
<td>20</td>
</tr>
<tr>
<td>L.A. 5-Co. Area</td>
<td>2,400 Tracts</td>
<td>1981</td>
<td>50</td>
</tr>
<tr>
<td>San Diego—Imperial</td>
<td>400 Tracts</td>
<td>1981</td>
<td>20</td>
</tr>
<tr>
<td>Rest of So. Ca. 3 Co's</td>
<td>180 Tracts</td>
<td>1981</td>
<td>20</td>
</tr>
</tbody>
</table>

### 1980 Population Distribution Maps & Overlays

Dot maps showing how the 1980 Population was distributed. The paper prints have the Census Tract boundaries in the background. The Mylar Overlays just show the Dots.

<table>
<thead>
<tr>
<th>Area Covered</th>
<th>Size</th>
<th>Year Issued</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>L.A. 5-Co. Area</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>$20</td>
</tr>
<tr>
<td>San Fran. Bay 13 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>30</td>
</tr>
<tr>
<td>San Fran. Bay 13 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>20</td>
</tr>
<tr>
<td>San Fran. Bay 13 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>30</td>
</tr>
<tr>
<td>San Diego—Imperial</td>
<td>31&quot;x36&quot;</td>
<td>1981</td>
<td>20</td>
</tr>
<tr>
<td>San Diego—Imperial</td>
<td>31&quot;x36&quot;</td>
<td>1981</td>
<td>30</td>
</tr>
<tr>
<td>San Fran. Bay 13 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>$20</td>
</tr>
<tr>
<td>L.A. 5-Co. Area</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>20</td>
</tr>
</tbody>
</table>

### 1980 SPANISH Population

Shows % of Population that were of "Spanish Origin", in 4 colors and 10 gradations.

<table>
<thead>
<tr>
<th>Area Covered</th>
<th>Size</th>
<th>Year Issued</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Fran. Bay 13 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>$20</td>
</tr>
<tr>
<td>L.A. 5-Co. Area</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>20</td>
</tr>
</tbody>
</table>

### 1980 BLACK Population

Shows % of Population that were "Black" or "Negro" in 4 colors and 10 gradations.

<table>
<thead>
<tr>
<th>Area Covered</th>
<th>Size</th>
<th>Year Issued</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Fran. Bay 13 Co's</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>$20</td>
</tr>
<tr>
<td>L.A. 5-Co. Area</td>
<td>30&quot;x42&quot;</td>
<td>1981</td>
<td>20</td>
</tr>
</tbody>
</table>

Other 1981 maps are described in the Co.'s Check List and Order Blank. Write or phone for your copy - address and phone number as above.
U.S. Bureau of Land Management
60 x 46 cm. 1:11,008,000 free BLM State Director, 2800 Cottage Way,
Room E-2841, Sacramento, CA 95825. GPO Depository No. I53.11:W12/6
Shows areas closed, open, and restricted to vehicle travel. Includes
descriptions of numbered areas on verso. OCLC: 4558667

U.S. Forest Service. Pacific Northwest Region.
70 x 98 cm. printed both sides. 1:720,000. Northern California on
one side, Southern California on other. free GPO Depository No.
A13.28: P11/2. Base Map produced by Engineering, Geometrics,
Forest Service, P.O. Box 3623, Portland, OR 97208.

U.S. Forest Service
Shasta-Trinity National Forest, California: forest visitors map.
43 x 44 cm. 1:400,000 free Forest Supervisor, Redding, CA 96001
GPO Depository No. A12.12:Sh2/3. Includes recreation site directory,
contains text and photos on verso. OCLC: 7387054

U.S. Forest Service
89 x 70 cm. 1:126,720. free Forest Supervisor, 175 South Fairview
Lane, Sonora, CA 95370. GPO Depository No. A13.28:St2. Includes
key map, vicinity map, and recreation site directory. Contains text
and ill. on verso. OCLC: 6819949

U.S. Bureau of Land Management
110 x 102 cm. 1:1,000,000. free GPO Depository No. I53.11:W64

University of California. Los Angeles. Department of Geography.
Exploring Canyon Country, Los Angeles & Ventura Counties, California.
48 x 63 cm. folded to 24 x 11 cm. Title on main map is: An Explor-
er's Map of Canyon Country. Maps on verso have titles: Pyramid Lake;
Condor Reserve; Lake Piru; Castaic Lake. Text on verso: Wildlife ref-
use and lake recreation. Location map is inset on main map and shows
the relationship of this map to the companion map created by the same
Department/Cartographic Laboratory at UCLA: Exploring the Santa Monica
Mountains. [1979] This map is Copyright 1981 by The Regents of UC.
Research and cartography: Dirk W. Hansen & Rolf D. Kleinhaus consul-
tant for graphics and design: Noel L. Diaz [Staff Cartographer].
Professor of Geography Norman J.W. Thower acknowledged the assistance
of students William Bradley, Jonathan Chapman, and Barbara Sarantitis.
Publisher is Abraham J. Falick, dba Navigator Press, 6010 Wilshire
Blvd., Los Angeles, CA 90036. $3.95 ea. + 6% tax for CA orders + 40¢
for Postage.
Colorado

ENMAP Corporation


88 x 56 cm. folded to 27 x 13 cm. printed both sides.

MAP SIDE: This is a full color map of Colorado with major roads, cities, and other features clearly shown and labeled. Its main attraction, however, is the prominent display of climate "data blocks", each located next to the city for which the data are given. There are 77 of these blocks...and include the following information:
elevation of weather station, yearly average temperature (F°), yearly average total precipitation, yearly average snowfall, and monthly averages for high and low temperatures, total precipitation, and snowfall.

Also the map side emphasizes locations and names of major Colorado ski areas, mountain passes...elevations are tinted yellow, green, brown: less than 7,500 feet, 7,500 to 10,000 feet, and greater than 10,000, respectively.


ENMAP Corp., Dept. FL, Box 4430, Boulder, CO 80306 $3.95 plus 50 cents shipping and handling per order. Bulk orders of 10 or more: $2.50 ea.
Hirleman, Nancy Colvin

Historical map of Huerfano County, Colorado / by Nancy Colvin Hirleman; with research assistance by Sara Jo Murphy. {La Veta, Colo.?, Huerfano County Historical Society?}, c1981.

1 map : 73 x 88 cm. Scale (1:126,720) 1/2 inch equals 1 mile. Brown print on cream paper. Includes illustrations of buildings and a brief chronology. OCLC: 7587989

Huerfano County Historical Society, Fort Francisco Museum, La Veta, Colorado 81055 =Price not known=

U.S. Bureau of Land Management


48 x 64 cm. 1:1,000,000 GPO Depository No. I53.11:W64

U.S. Forest Service


Forest Supervisor, P.O. Box 948, Glenwood Springs, CO 81601

U.S. Geological Survey

County Map Series. Through a joint effort by the state of Colorado and USGS, Colorado is the first state in the nation to have a new series of topographic maps completed. The maps of each of the state's 63 counties are now available for purchase by the public, following recent completion of the eight-year project.

The five-color maps were published by the USGS at a scale of 1:50,000. A total of 202 sheets are required to cover the 63 counties. Sheets range in size from 24 x 30 inches to 37 x 48 inches. Data for the new series were compiled from the most recent 1:24,000 and 1:62,500 scale maps and from aerial photographs, with selected new and revised information added.

The maps are available to the public at a cost of $2 per sheet from the Branch of Distribution, U.S. Geological Survey, P.O. Box 25286, Federal Center, Denver, CO 80225. Mail orders must specify the title and identification number of each map sheet requested and include a check or money order payable to USGS. An index is obtainable from the State Cartographer, Colorado Department of Local Affairs, Room 520, 1313 Sherman St., Denver, CO 80203, or the USGS Branch of Distribution listed above.

Idaho

U.S. Bureau of Land Management


81 x 53 cm. 1:1,000,000 GPO Depository No. I53.11:W64
U.S. Bureau of Land Management

Surface Management & Surface-Minerals Management intermediate scale maps, Scale 1:100,000

FORMAT: one ° longitude x 30 ° latitude geographic coverage
sheet size: 107 cm. by 76 cm. (42 x 30 inches)

CONTENT: Township, range, section lines; roads, streams, towns,
some other cultural and physiographic features.

EDITIONS: Surface Management portrays Public Lands managed by BLM,
other federal lands including those of the National Park Service, Fish and Wildlife Service, state lands, private
lands.
Surface-Minerals Management depicts the extent of Federal
owned mineral rights overprinted on the Surface Manage-
ment edition.

PRICE: $2.00 per sheet.

ORDERING: Specify edition. Idaho State Office, Room 398 Federal
building, 550 West Fort Street, or P.O. Box 042, Boise, ID 83724.
Also available at District Offices in Boise, Burley, Coeur d'Alene,
Idaho Falls, Salmon, and Shoshone.


U.S. Forest Service


JC 77 x 92 cm. printed on both sides of sheet, 1:168,000. GPO Depository
No. A13.13:Sa 9/5/979. Shows where motor vehicles are allowed,
restricted, or prohibited, includes text. OCLC: 7545177
Forest Supervisor, 1525 Addison Ave. East, Twin Falls, ID 83301.

Montana

U.S. Bureau of Land Management


RM 58 x 94 cm. 1:1,000,000 GPO Depository No. I53.11;M64

U.S. Bureau of Land Management

Upper Missouri National Wild & Scenic River (Montana). Washington,
D.C., 1980.

JC 4 maps, each 21 x 77 cm. or smaller, on 2 sheets, each 46 x 92 cm.
1:63,360 includes col. ill. and text. Intended to be used as a
floater's guide. BLM, Lewistown District, Airport Rd., Drawer 1160,
Lewistown, MT 59457 OCLC: #6954190 and #694250
GPO Depository No. I53.11; M690/no.1-4

U.S. Forest Service

Beaverhead National Forest, Montana : Forest Travel Plan. Washington,
D.C., 1981.

JC 2 maps on sheet 118 x 82 cm. 1:1140,000 Shows areas where motorized
vehicles are allowed, restricted, or prohibited. OCLC: 7630531
GPO Depository No. A13.28: B38w Forest Supervisor, Box 1258, Dillon,
MT 59725.
Nevada

U.S. Bureau of Land Management
80 x 55 cm. 1:1,000,000 GPO Depository No. I53.11:W64

U.S. Bureau of Land Management
Surface Management & Surface-Minerals Management intermediate scale maps. Scale 1:100,000
{see description in listings for IDAHO}


New Mexico

New Mexico Energy Institute at New Mexico State University
136 x 119 cm. 1:500,000 Includes text, legend, references cited, and inset map showing heat flow in the Rio Grande rift.
GPO Depository No. C55.22/2:424m OCLC: #7472803
The Institute, Box 3E1, Las Cruces, NM 88003

U.S. Bureau of Land Management
68 x 59 cm. 1:1,000,000 Includes col., ill., and text on verso.
GPO Depository No. I53.11:N42m BLM, P.O. Box 1449, Santa Fe, NM 87501 OCLC: #6720502

U.S. Bureau of Land Management
69 x 60 cm. 1:1,000,000 GPO Depository No. I53.11:W64

U.S. Bureau of Land Management
Surface Management & Surface-Minerals Management intermediate scale maps. Scale 1:100,000
{see description in listings for IDAHO}

NEW MEXICO sheets: Truth or Consequences, 1979.
New Mexico State Office, U.S. Post Office & Federal Bldg., South Federal Place, P.O. Box 1449, Santa Fe, NM 87501. District Offices in Albuquerque, Las Cruces, Roswell, Socorro.

U.S. Forest Service
2 maps on sheet 62 x 82 cm. 1:126,720 printed on both sides of sheet. Compiled in 1967, revised 1975. GPO Depository No. A 13.28:C48/2 OCLC: #7757226 Forest Supervisor, 10308 Candelaria NE, Albuquerque, NM 87102
Oregon

U.S. Bureau of Land Management

51 x 67 cm. 1:1,000,000 GPO Depository No. I53.11:W64

U.S. Bureau of Land Management

54 x 77 cm. 1:126,720 Includes col. ill. and text on verso.
GPO Depository No. I53.11:S19 BLM, Eugene District, P.O. Box 10226, Eugene, OR 97440 OCLC: #4452318

U.S. Bureau of Land Management

Surface Management & Surface-Minerals Management intermediate scale maps, Scale 1:100,000
(see description under IDAHO Listings)


Oregon State Office, 729 N.E. Oregon St., P.O. Box 2965, Portland, OR 97208. District Offices in Baker, Burns, Coos Bay, Eugene, Lakeview, Medford, Prineville, Roseburg, Salem, and Vale.

U.S. Forest Service

108 x 88 cm. 1:63,360 Includes recreation site directory. Verso contains an exceptionally clever illustration of wilderness camping regulations, tree and wildlife species, etc. GPO Depository No. A 13.28:ea3 Eagle Cap Ranger District, Enterprise, OR 97828 OCLC: #7632824

Utah

Hintze, Lehi F.

116 x 93 cm. 1:500,000 $12.00 Includes sheet of stratigraphic columns and profiles

U.S. Bureau of Land Management

23 sheets, each 93 x 78 cm. 1:126,400 GPO Depository No. I53.11:Ut 1/2 OCLC: #7407870 BLM, Utah State Office, University Club Bldg., 136 E. South Temple St., Salt Lake City, UT 84111

U.S. Bureau of Land Management

58 x 47 cm. 1:1,000,000 GPO Depository No. I53.11:W64
U.S. Bureau of Land Management

Surface Management & Surface-Minerals Management intermediate scale maps, Scale 1:100,000

(for description see IDAHO listings)

UTAH sheets: Escalante, 1980; Rush Valley, 1979; Salt Lake City, 1980.

Utah State Office, Federal Bldg., 125 S. State, P.O. Box 11505, Salt Lake City, UT 84147. District Offices, Cedar City, Moab, Richfield, Salt Lake City, Vernal.

U.S. Forest Service


2 maps on sheet 78 x 68 cm. 1:170,000 GP0 Depository No. A 13.13;M32 Shows where motor vehicles are allowed, restricted, or prohibited. Includes text. Forest Supervisor, Manti-LaSal National Forest, 599 West Price River Dr., Price; UT 84501 OCLC: # 7623895

Utah Geological and Mineral Survey


115 x 93 cm. 1:500,000 GP0 Depository No. C 55.22/2:Ut1 Includes text, table of thermal springs and wells, and physiographic provinces map of Utah. USGS, 606 Black Hawk Way, Salt Lake City, UT 84108 OCLC: # 7465281

Washington

U.S. Bureau of Land Management

Surface Management & Surface-Minerals Management intermediate scale maps, Scale 1:100,000

(for description see IDAHO listings)


Washington State Office, 729 N.E. Oregon St., P.O. Box 2965, Portland, OR 92708. District Office, Spokane.

U.S. Forest Service


on sheet 92 x 67 cm. printed on both sides of sheet. 1:126,720 Compiled in 1973, recreation data revised 1980. Includes text, col. ill., key maps, index to topo. maps, and recreation site directories. Forest Supervisor, 695 S. Main, Colville, WA 99114 OCLC: #7658235

U.S. Forest Service


on sheet 127 x 107 cm. 1:100,000 GP0 Depository A 13.28; W48 OCLC: #7634006 Forest Supervisor, Wenatchee, WA 98801
Wyoming

U.S. Bureau of Land Management


JC
14 sheets, each 56 x 84 cm. 1:200,000 Includes text and ill. on verso. Contents: #5 Bighorn Mts.; #6 Dull Knife; #7 Devils Gate; #8 Fort Steele; #9 Flaming Gorge; #10 South Pass; #11 Wind River; #12 Heart Mountain. OCLC: #s 5116497; 5116559; 5867122; 5624034; GPO Depository No. I53.11:W99 ELM Wyoming State Office, P.O. Box 1828, 2515 Warren Ave., Cheyenne, WY 82001 (phone 307/778-2326)

U.S. Bureau of Land Management


RM
48 x 62 cm. 1:1,000,000 GPO Depository No. I53.11:64

U.S. Bureau of Land Management

*Surface Management & Surface-Minerals Management intermediate scale maps.* Scale 1:100,000

{for description see IDAHO listings}

WYOMING sheets: Big Horn, 1979; Burgess Junction, 1979; Evanston, 1980; Newcastle, 1979; Nowater Creek, 1979; Worland, 1979.

Wyoming State Office, Lea Building, 2515 Warren Ave., P.O. Box 1828, Cheyenne, WY 82001. District Offices in Casper, Rawlins, Rock Springs, and Worland.

U.S. Forest Service


JC
74 x 76 cm. 1:170,000 Shows where motor vehicles are allowed, restricted, or prohibited. Text and ill. on verso. GPO Depository No. A 13.13: B76/3. Supervisor's Office, Bridger-Teton National Forest, 340 N. Cache St., P.O. Box 1888, Jackson, WY 83001 (phone 307/733-2752)

U.S. Forest Service

*Bridger-Teton National Forest, Wyoming: Bridge Division.* [Ogden, Utah?], [1981?]

JC
70 x 75 cm. 1:250,000 This map was reproduced by electronic color scanning of original (1968) map. Verso contains text, ill., and title: Bridger National Forest. GPO Depository No. A 13.28: B76 Forest Supervisor, P.O. Box 1888, Jackson, WY 83001 (phone 307/733-2752) OCLC: #5496569
News Notes!

MEXICO - NEW EFFORT TO SUPPLY NORTH AMERICAN LIBRARIES WITH MAPS

Stephen C. Mullin, longtime member of WAML, Map Library Assistant at UC Berkeley for nine years, has left the employ of the the University and has made one successful acquisitions trip to Mexico City to obtain topographic and other maps from the official Mexican agency that produces 1:50,000, 1:250,000, and 1:1,000,000 topo series, as well as geologic, land use, etc., and is planning another trip soon. He makes all customs clearances, shipping arrangements, etc., and charges for only those maps delivered to your library - prices range from $6.00 U.S. to $5.25 US, depending on the number of maps delivered, prices decreasing as the number of maps delivered increases. He may be reached at 456 Alcatraz Ave., Oakland, California 94609.

CANADA - ASSOCIATION OF CANADIAN MAP LIBRARIES - 1982 ANNUAL CONFERENCE

The A.C.M.L. conference will be held in Ottawa, in conjunction with the 75th anniversary celebrations of the National Map Collection. A number of special events will take place, including the opening of the exhibition on August 17: Treasurers of the National Map Collection. The 48th General Conference of IFLA will be held in Montreal, August 22-28.

Conference Theme: Map Producers and Map Collections: Perspectives on Co-Operation
Registration fee: $30.00 (subject to change)
Accommodation: University of Ottawa Residences or Skyline Hotel
Information: Organizing Committee - 1982 - ACML Conference, National Map Collection, Public Archives of Canada, 395 Wellington Street, Ottawa, Ontario K1A ON3

COLORADO - 2nd INTERNATIONAL CONFERENCE ON GEOLOGICAL INFORMATION


The program is arranged on the theme of international cooperation to identify and share geological information. Specialized sessions will be planned for topics such as building library collections, specialized data files, map acquisitions, translations, and publishing.

Residents of the Americas may contact D.C. Ward, 223 Natural History Bldg., 1301 West Green St., Urbana, Illinois 61801. All others write A.P. Harvey, Dept. of Library Services, British Museum (Natural History), Cromwell Road, London SW7 5BD, United Kingdom. Local chairman is H.K. Phinney, Jr., Director of Library, Colorado School of Mines, Golden Colorado 80401.
THE WORLD'S BIGGEST RELIEF MAP GETS AND OVERDUE FACELIFT

An article with the above title, by Brian Vachon and photographs by Richard Howard, appeared in the July 1981 Smithsonian (Vol. 12, No. 4) pp. 94-98. The map is the Babson College Great Relief Map (of the United States), conceived in 1923, completed in 1940, consisting of 1,600 17-by-12-inch blocks, each carefully built of cardboard with topographic details modeled in plaster. It was conceived by Roger Babson, and a brick building was constructed on the Babson College campus (at Wellesley Hills, Massachusetts) to house the map. It is 1×250,000 and measures 65 feet from Maine to California and 45 feet from Texas to Michigan.

NEW HEAD OF U.S. GEOLOGICAL SURVEY

Dr. Dallas L. Peck, 52, was appointed by President Reagan to be the Director of the U.S. Geodetical Survey. Peck, a native of Cheney, Washington, received his BA & BS in geology at California Institute of Technology and his PhD in 1960 at Harvard. He joined the USGS in 1951 and much of his career has been in geological and geothermal energy studies in the West, including field research at the USGS Hawaiian Volcano Observatory.

REBINDING (OR BOXING) OF ATLASES

J.B. Post, Map Librarian at the Free Library of Philadelphia, recently wrote to The Library Scene (Suite 633, 50 Congress St., Boston, MA 02109) and complained that a March 1981 issue of that journal which carried a list of 55 Certified Library Binders in the U.S. and Canada and their services did not include atlas binding.

The Editor of The Library Scene responded that it was impossible to include every type of service in the reference chart. ... A list of those Certified Library Binders who handle the rebinding (or boxing) of atlases will be sent to you. Anyone else who also would like this list may write to The Library Scene.

NORTH BY WEST - NEW MAP DEALER IN EDMONTON

NbW is a new Canadian business specializing in antique maps, prints, and topographic books. A particular specialty is Canada, the Arctic and the West, although material from all parts of North America will be carried.

17th & 18th century material has risen rapidly in price (approx. doubled in the past 5 years) but the special attractions of 19th century maps have not yet been widely recognized, so price tags are more affordable. NbW will carry a wide selection of material in the C$50. to C$250. price range.

NbW will invoice in American dollars at the prevailing rate and postage in the U.S. and Canada is included. NbW has issued its first list which is available at:

NbW (14), Box 11538, Main P.O. Edmonton, Alberta T5J 3K7, Canada.
Charley Seavey, Head, Government Publications & Maps, University of New Mexico, Albuquerque, has compiled the following list for which we are thankful:

According to the latest Library of Congress Publications in Print (1981) the following are available free on request. This publication lists many other LC publications relating to maps, but they all cost money. Get the free ones, and check the list for those you are willing to spend money for.


A la Cartel: selected papers on maps and atlases, 1972.


Detroit and vicinity before 1900: an annotated list of maps. 1968.


Three dimensional maps, an annotated list of references relating to the construction and use of terrain models. 2nd ed. 1964.


CALL FOR PAPERS - MAGERT Philadelphia 1982

The American Library Association will meet in Philadelphia, July 10-17, 1982. Part of the program of the Map and Geography Roundtable will be a session of contributed papers. There is no established theme, but papers should be related to maps either as historical documents, geographic tools, or information sources. Spoken presentations should be planned for around 20 minutes, although the text version may be as long as necessary. Please send a title and brief description or outline to the undersigned by November 1, 1981. Final selection will be made by December 1, 1981. Papers accepted for presentation will be considered for publication at a later date.

Charles A. Seavey, GPMD-General Library, University of New Mexico, Albuquerque, New Mexico 87131

USGS INTRODUCES A NEW PRODUCT - PROVISIONAL MAP EDITION - "P" Maps

The U.S. Geological Survey has announced a significant modification of its topographic map program. The National Mapping Division will add a provisional map edition for its 7.5-minute quads. The provisional map edition is essentially a partially edited, multicolor advance print that is printed lithographically in the same manner as standard maps. Provisional editions will be prepared for most remaining unmapped 7.5-minute quad areas, including areas currently covered by 15-minute maps. The first map in the seven state Rocky Mountain region of USGS will be available in 1982.

The primary objective of this program is to complete nationwide large-scale coverage by 1987-88. Otherwise completion could extend past the year 2000.
STATE-FEDERAL MAP COORDINATION MEETINGS:
A UNIQUE OPPORTUNITY FOR MAP LIBRARIANS

by

Steve Hiller
Map Librarian
University of Washington Libraries
Seattle

Each year the National Mapping Division (NMD) of the U.S. Geological Survey (USGS) and the State Mapping Advisory Committee (SMAC) of each state sponsor a State-Federal Map Coordination Meeting. The purpose of these annual gatherings is to bring together representatives from those federal and state agencies involved in mapping activities within the state to discuss current mapping programs and products.

Representatives from the National Mapping Division of the USGS present a review of USGS mapping activities with particular emphasis placed on statewide programs. Representatives from other governmental agencies also provide brief reports on their mapping activities. A highlight of these meetings are the recommendations for new topographic mapping in the state. While most map authorizations are established according to OMB Circular A-16, each state with a SMAC is allocated a certain number of maps based on state needs.

A brief review of the most recent Washington State-Federal Map Coordination Meeting will illustrate the potential usefulness of this meeting for map librarians. Representatives from twenty-five state and federal agencies attended the day long meeting held in Olympia on December 15, 1980. Roger Harding of the Washington State Department of Natural Resources (DNR), and Chairperson of the SMAC, opened the meeting with a brief statement on its purpose. He emphasized the advantages of interagency cooperation in the mapping field and described three programs in the state which embodied this cooperative approach: orthophotomap production, 1:100,000 scale map compilation, and the state resident cartographer program. Washington was the first state to have a resident cartographer, a position funded by the Western Mapping Center of the USGS and DNR. Responsibilities of the state resident cartographer include liaison work with the governmental agencies involved in mapping as well as dissemination of information concerning mapping programs and products to the public. This program has now spread to several other western states.

Dick Swinnerton, Chief of the Western Mapping Center (WMC), began the USGS part of the program with a lengthy presentation on the activities of the NMD and how they affect Washington state. He discussed the status of the standard topographic mapping program (7.5 minute series) and noted that while the completion date for this series is still scheduled for the late 1980s, maps in that series may not finally be published until 1994. It currently requires from five to eight years from the time of map authorization to map publication. He examined NMD priorities over the next decade which showed a shift from topographic mapping, revision and maintenance to the production of digital cartographic materials. Finally, he discussed the role of the WMC in Mt. St. Helens mapping and the volcano hazard program. The latter program will require new
1:24,000 scale topographic maps for many of the volcanic areas of the Northwest.

Pete Bermel, Assistant Division Chief, Plans and Coordination, National Mapping Division, was the next USGS speaker. He noted that state participation in joint funding agreements with the USGS was one method states could use to ensure that their areas of interest would be mapped expeditiously. He discussed the recent reorganization of the National Mapping Division and examined its budget. Mr. Bermel concluded with a review of the emerging digital cartography program at the NMD.

Dick Swinnerton returned with a brief presentation on the map reproduction services offered by the WMC. The WMC is currently upgrading services in this area by implementing an automatic tracking system on the availability and condition of reproducible items, developing a standard order form, upgrading materials, using more contract support, and establishing satellite sales outlets. The Washington State Department of Natural Resources, for example, will begin sale of USGS reproducibles for Washington state in Spring 1981. Mr. Swinnerton noted that the recent publication of the Map Data Catalog will provide the public with information on the variety and availability of NMD mapping products.

Gene Napier, Chief, Plans and Coordination, WMC, concluded the USGS presentation with a review of the past year's WMC activity in Washington (see Appendix A). He then discussed the requests for new mapping as submitted by federal agencies and the SMAC. Most of these recommendations called for new mapping in southcentral and southwest Washington. These requests will be sent to national headquarters in Reston where a final decision will be made on new mapping authorizations.

Roger Harding, Chair of Washington SMAC, returned with a discussion of DNR activities in the fields of orthophotography and the development of a statewide geographic information system. DNR will produce 1:12,000 orthophotomaps from 1:36,000 scale negatives. Productions will be on a regional basis, with the first region (extreme western Washington) to appear in 1981. DNR is also involved in the creation of a state geographic information system. The proposed Geographic Information Services Center will be administered by an advisory committee composed of representatives from state agencies which have contributed data to the system.

Brief reports from other agency representatives on their mapping activities followed. Among the highlights were the Mt. St. Helens mapping and photo programs of the U.S. Forest Service, Bureau of Land Management, Corps of Engineers, and Washington State Department of Transportation. The latter agency has also produced a new publication titled Urban Areas of Washington.

The Federal-State Map Coordination Meetings represent a unique opportunity for map librarians to meet with map producers and receive the latest information on mapping activities within their states. It is an excellent occasion to initiate contacts with those in the cartographic establishment and to communicate the needs of your collection and its community of users.

Most meetings are held in the fall and winter. If you are interested in attending your state meeting contact the chairperson of your SMAC for information and an invitation. The names and addresses of SMAC chairpersons in the WMC region are provided in Appendix B.
CALIFORNIA
Mr. Charles McCullough, Chief
Environmental Measurement Branch
Division of Planning
Department of Water Resources
1416 - 9th Street FTS 8-465-2352
Sacramento, CA 95814

COLORADO
Dr. Louis F. Campbell, Jr.
State Cartographer and Chairman
Colorado Mapping Advisory Committee
Colorado Division of Planning
1313 Sherman Street, #500-C
Denver, CO 80203

HAWAII
Mr. Kazutaka Saiki
State Land Surveyor
Survey Division
Department of Accounting and General Services
P.O. Box 119 (808) 548-7422
Honolulu, HI 96810

IDAHO
Mr. Ray Miller, Supervisor
Technical Services Section
Department of Lands
Statehouse FTS 8-554-3816
Boise, ID 83720

MONTANA
Mr. R. Thomas Dundas, Jr.
Chairman, Montana Mapping Advisory Committee
Research and Information Systems Division
Montana Department of Community Affairs
Capitol Station
Helena, MT 59620

NEVADA
Mr. Robert Rigsby (702) 885-4865
Office of the Governor
State Planning Coordinator's Office
State Capitol Building, Room 57
Carson City, NV 89710

NEW MEXICO
Mr. Forest F. Barron
Executive Secretary
New Mexico Mapping Advisory Committee
State Engineer's Office
State Capitol
Santa Fe, NM 87503

OREGON
Dr. John Beaulieu
Deputy State Geologist
Department of Geology and Mineral Industries
1069 State Office Building
Portland, OR 97201 FTS: 8-424-5580

TEXAS
Mr. C. R. Baskin, Chairman
Texas SMAC
Texas Dept. of Water Resources
P.O. Box 13087, Capitol Station
Austin, Texas 78711

UTAH
Mr. Donald T. McMillian
Chairman, Utah SMAC
Utah Geological & Mineral Survey
606 Black Hawk Way
Salt Lake City, Utah 84108

WASHINGTON
Mr. Roger A. Harding
Section Manager
Resource Inventory Section
Division of Management Services
Department of Natural Resources
Public Lands Building QW-21
Olympia, WA 98504 FTS: 8-206-753-5338

WYOMING
Mr. George Christopulos, Chairman
Wyoming SMAC
State Engineer
Barrett Building
Cheyenne, WY 82001

For information on activities in states outside of the WMC region, contact regional mapping centers in Denver, Rolla, or Reston.
# Washington

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<tr>
<th>Total No. of Mapping Units in State</th>
<th>No. of Maps Published FY 80</th>
<th>Published Total to Date</th>
<th>Total No. of Maps in Work</th>
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<th>No. of Maps Revised FY 80</th>
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* Revised form  
** Update

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<th>Total No. of Mapping Units in State</th>
<th>Availability of Advance Materials by Mapping Unit</th>
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APPENDIX A

U.S. Geological Survey
National Mapping Program
Fiscal Year 1980 Summary for the State of Washington

Program Objectives

Under the National Mapping Program, administered by the Geological Survey’s National Mapping Division (NMD), multipurpose published maps and basic map data are produced for a variety of needs. The Program’s published maps include topographic maps, orthophotoquads, State maps, land use, and other special subject maps. The Program provides a wide spectrum of basic map data as map production by-products, including aerial photographs, reproducible map materials, and geodetic control.

A recent Program emphasis is the reorientation from producing principally printed maps to an automated effort of creating and maintaining a digital data base that can be used to provide a wide variety of output including printed maps.

Services to Federal, State, and local agencies include the coordination of mapping requirements and technical assistance in satisfying them. Government agencies and the general public are served by the Program’s National Cartographic Information Center (NCIC).

Highlights of 1980

1. Statistics and indices of available products for the State (see Appendix C).
2. Washington State Mapping Advisory Committee participated in naming three hundred and fifty-three 1:24,000-scale quadrangles that were previously not named. The proposed names are presently being reviewed.
3. State Mapping Advisory Committee has reviewed the revised 1:500,000-scale State map, and it has been distributed to concerned agencies and counties for review.
4. The 1:100,000-scale metric Olympic National Park map is being revised.
5. A jointly funded Interagency Personnel Agreement between the Department of Natural Resources and the NMD was renewed for the State Resident Cartographer position.
6. Requests for sixteen new 1:24,000-scale maps were received from state agencies at the mapping coordination meetings hosted by the state, and eight were authorized. Seventeen 1:24,000 maps were authorized from federal requests; the twenty-five total authorizations are in the Mt. St. Helens (16) and Cle Elum (9) projects.
7. The NMD entered into a work-share agreement with the U.S. Forest Service to produce one hundred ninety-nine new orthophotoquads along the Cascade Mountain range.
8. The National High Altitude Program photography flown in FY 80 included all of Washington west of 123° longitude, and the eastern portion of the Seattle and Victoria 1:250,000 quadrangles. In FY 81 the Washington portion of the...
Vancouver, The Dalles, Pendleton, and Pullman 1:250,000 quadrangles, the remainder of Hoquiam, and the eastern half of the Yakima 1:250,000 quadrangles are also scheduled to be flown.

National Mapping Division (NMD) Mt. St. Helens activity has involved numerous federal, state, county, and private organizations in coordination and various kinds of mapping activities (see Mt. St. Helens Summary).

MT. ST. HELENS SUMMARY

1:24,000-Scale New Mapping

Twenty-eight new 1:24,000-scale topographic maps are in production.

Orthophotography

In support of the Mt. St. Helens disaster effort, a 32 orthophoto project was authorized utilizing 1980 1:40,000-scale quarter quad centered photos.

Digital Data

Thirty-two Digital Elevation Model quads were completed representing the pre-eruption condition of Mt. St. Helens. Post eruption elevation models are currently in work.

DLG

Thirty-two 1:24,000-scale quadrangles were authorized for digitizing public land surveys and boundaries.

1:100,000-Scale Mapping

A 1:100,000-scale special edition, pre-eruption map of Mt. St. Helens and vicinity was prepared and published within three weeks after the May 18 eruption.

A 1:100,000-scale post eruption map of Mt. St. Helens and vicinity is in progress in cooperation with the U.S. Forest Service and the Washington State Department of Natural Resources.

Land Use/Land Cover and Associated Maps

A 1:100,000-scale Land Use and Land Cover special edition update map is in progress.

The 1:250,000 land use/land cover and associated maps for Hoquiam (Mt. St. Helens is on the Hoquiam map) were digitized.

APPENDIX B

STATE MAPPING ADVISORY COMMITTEE CHAIRPERSONS

Alaska

Mr. Phil Wallick, Chairman
Alaska Mapping Advisory Committee
Department of Natural Resources
323 E. 4th Avenue; Anchorage, Alaska 99501

Arizona

Ms. Patricia Bergthold
Office of Economic Planning and Development; 1700 W. Washington
Executive Tower, Room 505; Phoenix, AZ 85007 (602) 255-3833
Geologic Map Index to USGS 7.5' & 15'
Quadrangles of California, 1883 - 1980
by Joe Crotts
Government Publications-Maps
University Library
California State University, Chico

This index covers the detailed geologic maps of California that are distributed among ten irregularly issued map and monograph series published by the United States Geological Survey. Previous indexes to these maps are not organized around a common areal descriptor of sufficiently limited extent, which makes it difficult to determine coverage of specific areas. This index correlates U.S.G.S. geologic maps of California with 7.5' and 15' topographic quadrangles.

The U.S.G.S. topographic index map for California provides areal access to 7.5' and 15'-square zones by division of the state into quadrangles. Patrons seeking a geologic map of a specific area frequently utilize the index map and define their area in terms of the corresponding quadrangle(s). The standard 7.5' and 15' topographic maps are frequently used as base maps for geologic maps. Requests for topographic maps are frequently followed by requests for geologic maps of those quadrangles.

Geologic maps having scales of 1:125,000 and larger are covered in this index. Chronologically, the index begins with the earliest relevant map in each series and extends through 1980; excluded from this index are maps issued in the Open-File Report series prior to 1974.

The arrangement of the index is alphabetical by quadrangle name, with 7.5' quadrangles preceding identically named 15' quadrangles. Data elements provided for each quadrangle are: series name and number of each report containing a geologic map of that quadrangle or portion thereof; and, the extent of coverage of each geologic map of the quadrangle.

The ten series containing geologic maps of California covered in this index, with their title abbreviations, and the beginning date of each series are listed in the Legend. Also listed are abbreviations of areas and geographic directions used in the descriptions.

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<td>GF Geologic Folio 1894-</td>
<td>L. Lake N north, north of</td>
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<td>GP Geophysical Investigations Map 1946-</td>
<td>N North NE northeast</td>
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<td>GQ Geologic Quadrangle Map 1949-</td>
<td>NW northwest</td>
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<td>I Miscellaneous Geologic Investigations</td>
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<td>MF Mineral Investigations Field Studies</td>
<td>SE southeast SW southwest</td>
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<td>OF Open-File Report 1974-</td>
<td>V. Valley</td>
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<td>OM Oil and Gas Map 1943-</td>
<td>W west, west of</td>
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<td>P Professional Paper 1902-</td>
<td>W. West</td>
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<td>W Water-Supply Paper 1896-</td>
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2 - Alexander V.
3 - T8N R8W 7,17-18,20,28-33
   T8N R9W 23,25-27,34-36
Healdsburg 7.5  W 1427  S 38°35'
Healdsburg 7.5  W 1548, pl. 1  T8N R9W 2-5,8-11,14-17,20-23,
                   26-29,32-35
                   T9N R8W 16-21,28-30
                   T9N R9W 13-17,20-29,32-35
                   incl. Russian R. valley
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Helendale 7.5  P 522  complete
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                   27-29,32-34
Hernandez Res. 7.5  OF 69-16  complete
Hernandez Valley 15  OF 69-16  complete
Hernandez Valley 15  P 819  T18S R9E 15-16,21-22,26-28,33-36
                   T19S R9E 1-4,9-16,21-28
                   T19S R10E 6-8,17-21,27-30
Herndon 15  MF 945  N ½
Hesperia 7.5  P 522  complete
Hi Vista 7.5  P 522  complete
Hidalgo Mtn. 7.5  I 490  complete
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High Divide 7.5  W 1254  T17N R1E 7 ; T17N R1W 1,12
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Hildreth Peak 7.5  I 752  N 34°35'
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             T17N R1W 13,24-25,36
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<td>(primarily south of Klamath River and west of Shasta River)</td>
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Hunters Point 7.5  MF 311  Hunters Point
Hunters Point 7.5  MF 574  Hunters Point
Huntington Lake 15  GQ 987  complete
Hurricane Deck 7.5  B 621-M  N 34°49' E 119°47'
Hurricane Deck 7.5  I 487  excl. northeast of Sierra Madre Rd.
Hurricane Deck 7.5  I 757  excl. S 34°46'40" W 119°48'20" (SW 1/8)
Idria 7.5  B 603  complete
Idyllwild 15  MF 1159-A  T5S R3E 7-17,20,23-26
Independence 15  B1181-0  complete
Independence 15  I 506  complete
Independence 15  MF 254  complete
Independence 15  P 110  complete
Independence 15  P 438, pl. 1 (sh. 3) complete
Indian Cove 7.5  I 561  complete
Indian Gulch 15  MF 945  SW 1/8
Inglewood 7.5  GP 149  complete
Inglewood 7.5  W 1461  complete
Inverness 7.5  MF 574  complete
Inyo Kern 7.5  W 2007  complete
Inyo Kern 15  W 2007  complete
Inyo Kern SE 7.5  W 2007  complete
Inyo Kern SE 7.5  P 522  excl. T27S R39E 2-4,10-11
Ione 7.5  GF 11  complete
Ione 7.5  OF 79-436  complete
Ione 7.5  P 827  T6N R10E 16,21
Irish Hill 7.5  GF 11  complete
Irish Hill 7.5  OF 79-436  complete
Irish Hill 7.5  GF 63  T7N R10E 9,16-17,20-21,28-29,33
Irish Hill 7.5  P 827  T6N R10E 4-5,9,16 ; T7N R9E 1,12 T7N R10E 4-9,16-21,28-29,32-33
Iron Mts. 15  MF 205  complete
Isabel Valley 7.5  MF 343  complete
Isabel Valley 7.5  P 943, pl. 1  Isabel V.
Isleton 7.5  MF 484, sh. 5  complete
Isleton 7.5  P 943, pl. 2  west of Steamboat Slough, incl. Ryer Island
Ivanpah 15  P 275  complete
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| Jackson 7.5            | GF 63     | T5N R11E 3-6,8-12,15-16,21-22  
|                        |           | T6N R10E 13-14,24-25  
|                        |           | T6N R11E 15-22,27-34  
| Jackson 7.5            | P 827     | T5N R11E 4-6,8-9,16-17  
|                        |           | T6N R10E 13,14-16,21,24-25  
|                        |           | T6N R11E 17-21,28-33  
| Jamison Ridge 7.5      | W 1548, pl. 3 | T22N R12W 19-23,27-32  
| Jawbone Ridge 7.5      | GF 41     | complete |
| Jenny Lind 7.5         | GF 11     | complete |
| Jenny Lind 7.5         | 79-436    | complete |
| Jericho Valley 7.5     | MF 483, sh. 4 | T11N R5W 2-5,7-11,14-23,26-35  
|                        |           | T11N R6W 24-26,35-36  
|                        |           | T12N R5W 23,26-27,33-35  
| Jersey Island 7.5      | MF 484, sh. 5 | complete |
| Jersey Island 7.5      | P 943, pl. 2 | south of San Joaquin River (Contra Costa Co.) |
| Jimtown 7.5            | P 943, pl. 1 | Alexander V.; Digger Bend |
| Jimtown 7.5            | W 1548, pl. 1 | T9N R8W 4-9,16-18  
|                        |           | T9N R9W 1-5,8-17; T10N R8W 30-32  
|                        |           | T10N R9W 15-17,20-29,32-36  
<p>|                        |           | (incl. area south of north slope of Alexander Valley) |
| Joaquin Rocks 7.5      | B 603     | complete |
| Joaquin Rocks 7.5      | B 357     | S 36°19'30&quot; |
| Joaquin Rocks 7.5      | B 398     | S 36°19'30&quot; |
| Johannesburg 7.5       | P 522     | complete |
| Johnsville 7.5         | GF 37     | complete |
| Jolon 7.5              | B 1181-Q  | complete |
| Jolon 7.5              | P 646-A   | complete |
| Jolon 7.5              | OM 24     | excl. S35°56'; W 121°12'30&quot; |
| Jolon 7.5              | P 819     | NE 1/4 |
| Jonesville 15          | P 731, pl. 1 | S 40°01' |
| Joshua Tree 15         | I 516     | complete |
| Joshua Tree North 7.5  | I 516     | complete |
| Joshua Tree South 7.5  | I 516     | complete |</p>
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<td>205</td>
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<td>S 40°10'30&quot;</td>
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<td>S 40°10'50&quot;, W 121°38'15&quot;</td>
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<td>Kirkville 7.5</td>
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La Cima 7.5

B 398
T21S R17E 34-36
T22S R17E 1-3,10-15,22-24
T22S R18E 4-22

La Cima 7.5

I 757
T21S R18E 26-28,32-35
T22S R17E 12-14,22-24
T22S R18E 2-11,14-23

La Cima 7.5

P 195
T21S R17E 26-27,34-36
T21S R18E 31
T22S R17E 1-3,10-15,22-24
T22S R18E 4-10,15-22

La Costa Valley 7.5

OF 80-533-A complete

La Costa Valley 7.5

MF 343
T4S R1E 25,35-36
T4S R2E 15-16,20-22,27-34
T5S R1E 1-2,11-14
T5S R2E 3-10,15-18

La Costa Valley 7.5

MF 429
T3S R1E 33-36 ; T3S R2E 31-33
T4S R1E 1-4,9-16,21-24,27-28,33-34
T4S R2E 4-9,16-21 ; T5S R1E 3
(Sunol Valley and north of Hetch Hetchy Aquaduct)

La Costa Valley 7.5

P 943, pl. 1 Sunol V.; La Costa V.; Vallecitos V.

La Grange 7.5

GF 41 complete

La Habra 7.5

P 420-C complete

La Habra 7.5

OM 23 T2S R10W 13-17,20-29,32-36

La Habra 7.5

OM 83 N 33°58' ; W 117°56'

La Honda 7.5

GF 163 complete

La Honda 7.5

MF 328 complete

La Honda 7.5

MF 575 complete

La Honda 7.5

OF 80-245 complete

La Llebre Ranch 7.5

P 522 complete

La Panza 7.5

B 406 complete

La Panza 7.5

I 757 complete

La Panza 15

I 757 complete

La Panza NE 7.5

I 757 complete

La Panza NE 7.5

B 406 N 35°19'30"

La Panza Ranch 7.5

I 757 complete

La Panza Ranch 7.5

B 406 E 120°09'

La Porte 7.5

GF 37 complete

Laguna Beach 7.5

OM 193 complete

Laguna Dam 7.5

GQ 1014 complete
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<td>Lake Shastina 15 (formerly Dwinnell Res. 15)</td>
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<td>P 338</td>
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Las Trampas Ridge 7.5  GF 193  complete
Las Trampas Ridge 7.5  OF 80-545  complete
Las Trampas Ridge 7.5  P 943, pl. 1  San Ramon V.; Stone V.; Tice V.; Burton V.; Moraga V.
Las Yeguas Ranch 7.5  B 406  complete
Las Yeguas Ranch 7.5  I 757  complete
Las Yeguas Ranch 7.5  OF 77-611  complete
Las Yeguas Ranch 7.5  B 721  T28S R18E 13 ; T28S R19E 13-29,35-36
Last Chance Range 15  I 506  complete
Latrobe 7.5  GF 3  complete
Latrobe 7.5  P 827  T8N R9E 36
                      T8N R10E 20-21,28-33 (Amador County [south of Cosumnes River]
                      east of 120°56')
Laurel 7.5  OF 78-84  complete
Lavic 15  I 472  complete
Lavic Lake 7.5  I 472  complete
Lavic Lake 7.5  MF 205  complete
Lavic SE 7.5  I 472  complete
Laytonville 7.5  W 1548, pl. 5  T21N R14W 6-7,17-21,28-33
                      T21N R15W 1-2,11-14,23-26,36
Le Grand 7.5  MF 945  complete
Le Grand 7.5  MF 927  S 37°12'40" (Dutchman Creek)
Le Grand 15  MF 927  T8S R16E 25-28,32-36
                      T8S R17E 21-22,26-36 ; T8S R18E 31
                      T9S R16E 1-5,8-17,20-29,32-36
                      T9S R17E 1-36
                      T9S R18E 6-8,16-21
                      T10S R16E 1-5,8-17,20-29,32-36
                      T10S R17E 2-24,26-35 ; T11S R16E 1-5
                      T11S R17E 2-6
Le Grand 15  MF 945  excl. NE 1/8
Lead Mtn. 7.5  MF 205  complete
Lead Mtn. 15  MF 205  complete
Lead Mtn. NE 7.5  MF 205  complete
Lead Mtn. SW 7.5  MF 205  complete
Lebec 7.5  P 522  complete
Leuhman Ridge 7.5  B 1098-B  complete
Levis 7.5  B 603  S 36°34'
Liberty Island 7.5  W 1464  complete
Liberty Island 7.5  P 943, pl. 2  W 121 41'30" (Shag Slough)
                      E Sacramento River, within Yolo Co.
Lick Observatory 7.5  MF 335  two lowland areas in west Yerba Buena Land Grant, from ca. 37°17' to 37°18' N. Lat., 121°44'30" to 121°45'

Lick Observatory 7.5  MF 343  T6S R2E 1-3 ; T6S R3E 31-34
T7S R2E 1-2,11-13
T7S R3E 3-10,15-22,27-30,32-34
T8S R3E 3-5,9-10

Lick Observatory 7.5  P 943, pl. 1  lowlands in SW ¼ of quad.
Halls V. ; San Felipe V.

Liebre Mtn. 7.5  P 522  T7N R17W 1-36
T7N R18W 1-2,13-14,23-24
T8N R17W 25-36
T8N R18W 25-26,35-36

Liebre Twins 7.5  P 522  T9N R15W 5-8
T9N R16W 1-12
T10N R15W 5-8,17-20,29-32
T10N R16W 1-2,7-36 ; T11N R15W 31

Lillis Ranch 7.5  B 603  complete

Lime Mtn. 7.5  P 646-B  complete

Lime Mtn. 7.5  OM 24  T25S R9E 21-28,34-36
T25S R10E 19-22,27-34
T26S R9E 1-2,12
T26S R10E 3-10,15-17,20-22,27-28

Lime Mtn. 7.5  P 819  NE ¼

Lincoln 7.5  GF 5  complete

Lincoln 7.5  OF 79-583  complete

Lincoln 15  GF 5  complete

Lincoln 15  OF 79-583  complete

Linden 7.5  OF 79-664  complete

Lion Canyon 7.5  OF 79-1464  complete

Lion Canyon 7.5  I 752  N 34°35'

Little Buttes 7.5  P 522  complete

Little Lake 15  W 2007  complete

Little Pine Mtn. 7.5  I 487  N 34°36'30" ; W 119°40'30"

Little Table Mtn. 7.5  MF 945  T10S R19E 11-14,23-26,35-36
T10S R20E 18-21,26-35
T11S R19E 1-2 ; T11S R20E 2-6

Littlerock 7.5  P 522  complete

Livermore 7.5  MF 429  complete

Livermore 7.5  OF 80-533-B  complete

Livermore 7.5  P 943, pl. 1  Livermore V. ; Amador V. ; lowlands N 37°42'30" ; E 121°47'
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Lopez Mtn. 7.5  GF 101  complete
Lopez Mtn. 7.5  MF 686  complete
Lopez Mtn. 7.5  OF 74-223  complete
Lopez Mtn. 7.5  I 757  T29S R13E 25-36; T29S R14E 29-32
Lopez Mtn. 7.5  T30S R13E 1-4,10-14,24
Lopez Mtn. 7.5  T30S R14E 5-8,17-20,29-30,32
Lopez Mtn. 7.5  I 1097, sh. 3  T30S R13E 7,17-20,27-35
Lopez Mtn. 7.5  T31S R13E 1-6
Lopez Point 7.5  MF 750  complete
Los Alamos 7.5  B 322  complete
Los Alamos 7.5  OM 14  N 34°40'
Los Alamos 7.5  OM 26  T6N R32W 4-6; T6N R33W 1-4
Los Alamos 7.5  T7N R32W 4-9,16-21,28-33
Los Alamos 7.5  T7N R33W 12-14,23-27,34-36
Los Alamos 7.5  T8N R32W 29-33
Los Alamos 7.5  P 222  N 34°40'
Los Alamos 7.5  W 1107  S 34°43'
Los Alamos 7.5  W 1664  T7N R32W 4-9,16-18
Los Alamos 7.5  T7N R33W 1-5,10-12
Los Alamos 7.5  T8N R32W 19-21,28-33
Los Alamos 7.5  T8N R33W 25-29,32-36 (primarily the Purisma Hills and northward)
Los Banos Valley 7.5  OF 75-394  complete
Los Banos Valley 7.5  B 603  T11S R8E 8-17,20-27,35-36
Los Banos Valley 7.5  T11S R9E 5-8,17-20,29-32
Los Banos Valley 7.5  T12S R8E 1; T12S R9E 5-6,8,17
Los Gatos 7.5  OF 78-453  complete
Los Gatos 7.5  MF 335  T8S R1E 7-8,17-20; T8S R1W 8-17,20-22
Los Gatos 7.5  MF 643  T8S R1W 17,20-21
Los Gatos 7.5  P 943, pl. 1  urbanized lowlands east of Los Gatos Creek in N 1/2 of quad.
Los Machos Hills 7.5  I 757  complete
Los Olivos 7.5  B 322  complete
Los Olivos 7.5  W 1107  excl. T8N R31W 26,35
Los Viejos 7.5  B 357  W 119°55'
Los Viejos 7.5  B 398  W 119°55'
Los Viejos 7.5  I 757  excl. T22S R19E 22-27,35-36
Los Viejos 7.5  T23S R19E 1-2,11-13,24
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Maricopa 7.5  B 406  complete
Maricopa 7.5  I 757  complete
Maricopa 7.5  P 116  complete
Maricopa 7.5  W 1656, pl. 3  excl. T11N R24W 6-7,18-19,30-32
               T11N R25W 1,12-13,24-25,36
Marina 7.5  MF 1199  complete
Mariposa Peak 7.5  OF 75-394  complete
Mariposa Peak 7.5  MF 343  T11S R7E 7-10,15-21,29-31
Marion Peak 15  GQ 1399  complete
Mark West Springs 7.5  MF 483, sh. 3  complete
Mark West Springs 7.5  P 943, pl. 1  Knights Valley
Mark West Springs 7.5  W 1427  T8N R7W 18-19,30
              T8N R8W 2-4,9-16,21-28,33-36
              T9N R8W 27-28,33-34
Martis Peak 7.5  GF 39  complete
Marysville 15  GF 17  complete
McDonald Peak 7.5  P 522  T7N R19W 3
              T8N R19W 27-30,32-34
              T26S R26E 1-4,9-17,20-29,31-36
McKittrick Summit 7.5  B 406  complete
McKittrick Summit 7.5  I 757  complete
McKittrick Summit 7.5  B 721  T29S R20E 25-28,33-36
              T29S R21E 30-31
Meadow Valley 7.5  GF 43  complete
Meadow Valley 7.5  P 731, pl. 1,3  complete
Meeks Bay 7.5  GF 39  complete
Melones Dam 7.5  GF 63  T1N R13E 1-2 ; T2N R13E 25-27,35-36
Melville Lake 7.5  I 518  complete
Mendenhall 7.5  MF 343  complete
Mendenhall Springs 7.5  MF 343  T3S R3E 32-34
              T4S R2E 22-23,25-27,34-36
              T4S R3E 3-5,8-10,15-17,20-22,27-34
              T5S R2E 1-3,10-15
              T5S R3E 2-11,15-18
              excl. Lake del Valle area
Mendenhall Springs 7.5  MF 429  T3S R2E 34-36 ; T3S R3E 31
              T4S R2E 1-3,11-13 ; T4S R3E 6-7,18-19
              (Lake del Valle and northward)
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<td>W 1464</td>
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<td>Merritt 7.5</td>
<td>P 943, pl. 2</td>
<td>Solano Co.</td>
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<td>Mescal Creek 7.5</td>
<td>P 522</td>
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<td>Mettler 7.5</td>
<td>W 1656, pl. 3</td>
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<tr>
<td>Mettler 7.5</td>
<td>P 116</td>
<td>S 35°05'30&quot; ; W 118°54'30&quot;</td>
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<tr>
<td>Michigan Bluff 7.5</td>
<td>GF 66</td>
<td>complete</td>
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<tr>
<td>Midway 7.5</td>
<td>OF 80-535</td>
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</tr>
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<td>Midway 7.5</td>
<td>MF 343</td>
<td>T3S R3E 34-36 ; T3S R4E 31-32</td>
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<td>Miles 7.5</td>
<td>MF 80-533-C</td>
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<tr>
<td>Millerton Lake West 7.5</td>
<td>MF 945</td>
<td>S 37°02'; W 119°42'30&quot;</td>
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<td>Milligan 15</td>
<td>MF 205</td>
<td>T2N R17E 4-18 ; R3N R17E 30-32</td>
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<td>Millux 7.5</td>
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<tr>
<td>Millux 7.5</td>
<td>B 812-D</td>
<td>S 35°06'</td>
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<tr>
<td>Millville 15</td>
<td>GF 138</td>
<td>complete</td>
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<tr>
<td>Millville 15</td>
<td>P 338</td>
<td>T33N R2W 1-5,8-12,14-17</td>
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<td>Milpitas 7.5</td>
<td>MF 335</td>
<td>S 37°27'30&quot; but excl. salt evaporators</td>
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<td>Milpitas 7.5</td>
<td>MF 429</td>
<td>T5S R1E 18-19,30; T5S R1W 13-17,21-25,36</td>
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<td>Milpitas 7.5</td>
<td>P 943, pl. 1</td>
<td>excl. uplands in NE ¼ of quad., west of Hwy 680</td>
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Mindego Hill 7.5  
G F 163  
complete

Mindego Hill 7.5  
M F 328  
T6 S R3 W 31-33; T6 S R4 W 36  
T7 S 33 W 4-10,13-15,23,26-35  
T7 S 34 W 1,12-13,24-25,36  
T8 S R3 W 2-11; T8 S R4 W 1-12  
(San Mateo Co.)

Mindego Hill 7.5  
M F 335  
T6 S R2 W 31; T6 S R3 W 36  
east of Junipero Freeway

Mindego Hill 7.5  
M F 575  
San Mateo Co.

Minneola 7.5  
I 592  
complete

Mint Canyon 7.5  
O M 196  
S 34°27’; W 118°28’

Mint Canyon 7.5  
P 334-H  
T3 N R15 W 5-6; T4 N R15 W 7-8,17-20,29-32

Miranda Pine 7.5  
I 757  
complete

Mississippi Creek 7.5  
M F 343  
excl. T8 S R5 E 10-15,23-26,36  
T9 S R4 E 23,26

Mississippi Creek 7.5  
M F 416  
Santa Clara Co.

Moccasin 7.5  
G F 41  
complete

Moccasin 7.5  
M F 840  
complete

Moccasin 7.5  
G F 63  
T1 S R15 E 4-10,14-23,25-36  
T1 S R16 E 31; R2 S R15 E 1-6,8-16,21-24  
T2 S R16 E 6-7,18-19

Mojave 7.5  
M F 219  
complete

Mojave 7.5  
P 522  
complete

Mojave 15  
M F 219  
complete

Mojave 15  
P 522  
complete

Mojave NE 7.5  
M F 219  
complete

Mojave NE 7.5  
P 522  
complete

Mokelumne Hill 7.5  
G F 11  
complete

Mokelumne Hill 7.5  
G F 63  
T5 N R11 E 1-3,10-15,22-27  
T5 N R12 E 5-8,16-22,27-30  
T6 N R11 E 14-15,22-27,34-36  
T6 N R12 E 31

Mokelumne Hill 15  
G F 11  
complete

Monache Mtn. 15  
P 110  
E 118°13’50”

Monache Mtn. 15  
P 430, pl. 1  
est portion of quad. ranging from  
(sh. 3)  
118°W long. at 36°N lat. to  
118°05’ W long. at 36°15’ N lat.

Monarch Peak 7.5  
B 581-D  
complete

Monarch Peak 7.5  
O M 24  
T19 S R10 E 27,33-36  
T20 S R10 E 1-3,10-15,22-27,34-36  
T20 S R11 E 18-20,28-35  
T21 S R10 E 1-3; T21 S R11 E 2-6
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<td>Monarch Peak 7.5</td>
<td>P 819</td>
<td>SW ¼</td>
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<td>Mono Craters 15</td>
<td>GQ 462</td>
<td>complete</td>
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<tr>
<td>Mono Craters 15</td>
<td>P 438, pl. 1</td>
<td>west of Lee Vining Peak, Gibbs Lake, Walker Lake, Parker Lake, Silver Lakes; excl. area south of Silver Lakes and Gull Lake</td>
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<td>Mono Craters 15</td>
<td>P 1044-A</td>
<td>S 37°48'15&quot; ; E 119°05'40&quot;</td>
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<td>Monocline Ridge 7.5</td>
<td>B 603</td>
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<td>OF 75-394</td>
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<td>OM 128</td>
<td>T15S R12E 25,36 ; T16S R12E 1</td>
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<td>Monolith 7.5</td>
<td>I 607</td>
<td>complete</td>
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<td>Monolith 7.5</td>
<td>P 522</td>
<td>complete</td>
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<td>Montara Mtn. 7.5</td>
<td>GF 193</td>
<td>complete</td>
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<td>Montara Mtn. 7.5</td>
<td>MF 328</td>
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<td>Montara Mtn. 7.5</td>
<td>MF 575</td>
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<td>Montara Mtn. 7.5</td>
<td>MF 652</td>
<td>San Andreas Lake and shore</td>
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<td>Monterey 7.5</td>
<td>MF 577</td>
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<td>Monterey 15</td>
<td>MF 750</td>
<td>S 36°38'45&quot;</td>
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<td>OF 79-1606</td>
<td>complete</td>
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<td>Monticello Dam 7.5</td>
<td>W 1464</td>
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<td>Montpelier 7.5</td>
<td>OF 80-607</td>
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<td>Monument Peak 7.5</td>
<td>OF 78-697</td>
<td>complete</td>
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<tr>
<td>Monumental Pass 7.5</td>
<td>P 486-J</td>
<td>T7N R22E 1-4,10-14,23-25 ; T8N R22E 33-36</td>
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<tr>
<td>Moonlight Peak 7.5</td>
<td>B 353</td>
<td>S 40°10'50&quot;</td>
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<td>Moonridge 7.5</td>
<td>I 431</td>
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<td>Moonridge 7.5</td>
<td>MF 1161-A</td>
<td>T1N R1E 23-27,34-36 ; T1N R2E 19,29-33 (San Gorgonio Wilderness)</td>
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<td>Mooreville Ridge 15</td>
<td>GF 43</td>
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<td>Moorpark 7.5</td>
<td>OF 76-210</td>
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<td>Moorpark 7.5</td>
<td>B 309</td>
<td>N 34°20'</td>
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<td>Morgan Hill 7.5</td>
<td>MF 335</td>
<td>T8S R2E 13-14,22-24,26-27,34-36 ; T8S R3E 17-21,27-30,32-34 ; T9S R2E 1-3,11-12 ; T9S R3E 4,6-10,15-22,27-29 (Santa Clara Valley and Canada de San Felipe y Las Animas Land Grant)</td>
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<td>Location</td>
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<td>Description</td>
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<td>Morgan Hill 7.5</td>
<td>MF 416</td>
<td>east of old Hwy 101</td>
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<tr>
<td>Morgan Hill 7.5</td>
<td>P 943</td>
<td>lowlands incl. Santa Clara V., Paradise V., Hayes V., Uvas Creek V., Little Arthur Creek V., Bodfish Creek V.</td>
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<td>Morgans Well 7.5</td>
<td>I 477</td>
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<td>Morgans Well 7.5</td>
<td>MF 205</td>
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<td>Morongo Valley 7.5</td>
<td>I 517</td>
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<td>Morongo Valley 15</td>
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<td>Morro Bay North 7.5</td>
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<td>Morro Bay South 7.5</td>
<td>GF 101</td>
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<td>Morro Bay South 7.5</td>
<td>I 1097</td>
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<td>Morro Bay South 7.5</td>
<td>MF 511</td>
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<td>Moss Landing 7.5</td>
<td>MF 1199</td>
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<tr>
<td>Moss Landing 7.5</td>
<td>MF 648</td>
<td>west of Pajaro R. (Santa Cruz Co.)</td>
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<tr>
<td>Mt. Abbot 15</td>
<td>GQ 1155</td>
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<tr>
<td>Mt. Barcroft 15</td>
<td>GQ 960</td>
<td>complete</td>
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<td>Mt. Barcroft 15</td>
<td>P 438</td>
<td>pl. 1 (sh. 1) W 118°10'</td>
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<td>Mt. Barcroft 15</td>
<td>P 800-B/pl. 97</td>
<td>N 37°36' ; W 118°13'30''</td>
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<td>Mt. Boardman 7.5</td>
<td>MF 343</td>
<td>T5S R4E 13-14,23-26,35-36 T5S R5E 18-19,30-32 T6S R4E 1-2,11-14,23-26,35-36 T6S R5E 5-9,16-21,28-34</td>
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<td>Mt. Carmel 7.5</td>
<td>MF 750</td>
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<td>Mt. Day 7.5</td>
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<td>Mt. Dome 15</td>
<td>W 1491</td>
<td>W 41°45'</td>
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<td>Mt. Fillmore 7.5</td>
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<td>Mt. George 7.5</td>
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<td>Mt. George 7.5</td>
<td>W 1495</td>
<td>S 38°21' ; W 122°10'</td>
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Mt. Goddard 15  P 110  T8S R30E 23-25,36 ; T8S R31E 19-36
              T8S R32E 19,30-31
              T9S R31E 1-5,9-15,24-25,36
              T9S R32E 5-8,17-20,29-32
Mt. Goddard 15  P 438, pl. 1  T8S R30E 13-14,23-26,36; T8S R31E 13-36
              T8S R32E 18-19,30-31
              T9S R31E 1-6,8-16,21-27,35-36
              T9S R32E 5-8,17-20,29-32; T10S R31E 36
              T10S R32E 5-8,17-18
Mt. Goddard 15  P 470  T8S R29E 13,24-25
              T8S R30E 13-30,32,34-36; T8S R31E 13-36
              T8S R32E 18-19,30-31
              T9S R30E 1-2,12-14,24-25
              T9S R31E 1-30,34-36
              T9S R32E 5-8,17-20,29-32; T10S R31E 1-2
              T10S R32E 5-8,17-18
Mt. Goddard 15  GQ 429  complete
Mt. Ingalls 7.5  GF 37  complete
Mt. Laguna 7.5  QF 79-862  complete
Mt. Madonna 7.5  MF 335  Floodplains of the valleys west of
                 Chesbro and Uvas Reservoirs, including
                 the Bodfish, Little Arthur
                 and Uvas Creek floodplains, and the
                 Hayes, Paradise and Santa Clara
                 Valleys. Excludes intermittent
                 uplands within floodplains
Mt. Madonna 7.5  MF 416  east of old Hwy 101
Mt. Madonna 7.5  P 943, pl. 1  Santa Clara V.; Shingle V.;
                 Animas Creek V.
Mt. Manchester 7.5  P 486-J  Calif. area, excl. T11N R21E 6-7,18
                   T12N R21E 30-31
Mt. Mesa 7.5  P 522  complete
Mt. Morrison 15  P 385  complete
Mt. Morrison 15  P 438, pl. 1  excl. Cascade V. and westward in
                   (sh. 1)  SW portion of quad.
Mt. Morrison 15  P 438, pl. 2  complete
Mt. Morrison 15  P 1044-A  excl. Fresno Co. (SW 1/8 of quad.)
Mt. Pinchot 15  B 1130  complete
Mt. Pinchot 15  P 110  E 118°
Mt. Pinchot 15  P 438, pl. 1 (sh. 3)  Inyo Co. (E 1/2 of quad.)
Mt. St. Helena 7.5  MF 483, sh. 3  excl. T10N R7W 3-6,8-10
Mt. St. Helena 7.5  P 943, pl. 1  Knights V.
Mt. San Antonio 7.5  P 522  T2N R7W 5-8,17; T2N R8W 1-4,11-12
                     T3N R7W 5-8,17-20,29-32
                     T3N R8W 1-36
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<td>Mt. Sizer 7.5</td>
<td>MF 335</td>
<td>T9S R3E 2-3, 10-12, 15, 22-27 T9S R4E 19, 30</td>
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<td>Mt. Sizer 7.5</td>
<td>MF 343</td>
<td>T8S R3E 11-14, 23-25 T8S R4E 7-11, 14-23, 26-35 T9S R4E 2-5, 9-11, 14-15</td>
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<td>Mt. Stakes 7.5</td>
<td>MF 343</td>
<td>T6S R4E 35-36; T6S R5E 31-35 T7S R4E 1-2, 11-14, 23-26, 35-36 T7S R5E 2-11, 15-22, 28-33 T8S R4E 1-2, 11-12; T8S R5E 4-9</td>
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<td>Mt. Tamalpais 15</td>
<td>GF 193</td>
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<td>Mt. Tamalpais 15</td>
<td>MF 574</td>
<td>complete</td>
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<td>Mt. Tom 15</td>
<td>P 110</td>
<td>T5S R32E 31; T6S R31E 13, 23-29, 32-36 T6S R32E 6-7, 18-19, 30-31 T7S R30E 25, 36; T7S R31E 1-36 T7S R32E 6-7, 18-19, 30-31 T8S R30E 1, 12-13; T8S R31E 1-18 T8S R32E 6-7, 18</td>
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<td>Mt. Tom 15</td>
<td>P 438, pl. 1 (sh. 2)</td>
<td>excl. Fresno Co. and vicinities of Honeymoon, Pine, Morgan and Hidden Lakes north of Fresno Co.</td>
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<tr>
<td>Mt. Tom 15</td>
<td>P 438, pl. 2</td>
<td>N 37°30' ; E 118°40'</td>
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<td>Mt. Tom 15</td>
<td>P 470</td>
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<td>Mt. Vaca 7.5</td>
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<td>W 1464</td>
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<tr>
<td>Mt. Vaca 15</td>
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<td>complete</td>
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<tr>
<td>Mt. Whitney 15</td>
<td>P 110</td>
<td>primarily Inyo Co.</td>
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<tr>
<td>Mt. Whitney 15</td>
<td>P 438, pl. 1 (sh. 3)</td>
<td>E 118°20'</td>
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<tr>
<td>Mountain Springs Canyon 15</td>
<td>W 2007</td>
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<td>Mountain View 7.5</td>
<td>GF 163</td>
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<tr>
<td>Mountain View 7.5</td>
<td>MF 335</td>
<td>S 37°26' (south of San Francisco Bay and salt evaporators)</td>
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<td>Mountain View 7.5</td>
<td>P 943, pl. 1</td>
<td>excl. Los Altos Hills</td>
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<td>B 835</td>
<td>T31S R24E 11-14; T31S R25E 7-8, 18</td>
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<td>I 757</td>
<td>W 119°17'</td>
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<td>P 912, pl. 3</td>
<td>T31S R24E 11-14; T31S R25E 7-8, 18 (Elk Hills)</td>
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<td>Mustang Peak 7.5</td>
<td>MF 416</td>
<td>Santa Clara Co.</td>
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<td>MF 343</td>
<td>T9S R6E 2,6-30 (Santa Clara County)</td>
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<td>Napa 7.5</td>
<td>MF 483, sh. 2</td>
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<td>Napa 7.5</td>
<td>W 1495</td>
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<td>P 943, pl. 2</td>
<td>Napa V.</td>
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<td>Natividad 7.5</td>
<td>MF 1199</td>
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<td>Natividad 7.5</td>
<td>MF 357</td>
<td>NE ¼ of quad.</td>
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<td>Nattrass Valley 7.5</td>
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<td>P 819</td>
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<td>Nattrass Valley 7.5</td>
<td>B 581-D</td>
<td>N 36°10'</td>
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<td>Nebo 7.5</td>
<td>I 592</td>
<td>complete</td>
</tr>
<tr>
<td>Needles 7.5</td>
<td>P 486-J</td>
<td>Calif. area</td>
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<td>P 486-J</td>
<td>Calif. area</td>
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<td>Needles SW 7.5</td>
<td>P 486-J</td>
<td>excl. TBN R21E 13,24-25; TBN R22E 19,30</td>
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<td>Neenach School 7.5</td>
<td>P 522</td>
<td>complete</td>
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<td>Nevada City 7.5</td>
<td>GF 18</td>
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<td>GF 29</td>
<td>T16N R8E 1-3,10-15; T16N R9E 6-7,18</td>
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<td>Nevada City 15</td>
<td>GF 18</td>
<td>complete</td>
</tr>
<tr>
<td>New Cuyama 7.5</td>
<td>I 757</td>
<td>complete</td>
</tr>
<tr>
<td>New Cuyama 7.5</td>
<td>I 876</td>
<td>complete</td>
</tr>
<tr>
<td>New Cuyama 7.5</td>
<td>B 621-M</td>
<td>S 34°58'30&quot;</td>
</tr>
<tr>
<td>New Cuyama 7.5</td>
<td>OM 217</td>
<td>N 34°56'45&quot;</td>
</tr>
<tr>
<td>New Hope 7.5</td>
<td>OF 79-933</td>
<td>complete</td>
</tr>
<tr>
<td>New York Butte 15</td>
<td>I 506</td>
<td>complete</td>
</tr>
<tr>
<td>New York Butte 15</td>
<td>P 110</td>
<td>complete</td>
</tr>
<tr>
<td>New York Butte 15</td>
<td>P 408</td>
<td>S 36°36'10&quot; ; W 117°45'30&quot; (pl. 1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E 117°49'45&quot; (pl. 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S ¼ of quad. (pl. 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(excl. Owens V.)</td>
</tr>
<tr>
<td>New York Butte 15</td>
<td>P 438, pl. 1 (sh. 3)</td>
<td>complete</td>
</tr>
<tr>
<td>Newark 7.5</td>
<td>GF 193</td>
<td>complete</td>
</tr>
<tr>
<td>Newark 7.5</td>
<td>MF 429</td>
<td>E 122°05'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>excl. mountainous area east of Hayward</td>
</tr>
<tr>
<td>Newark 7.5</td>
<td>P 943, pl. 1</td>
<td>excl. uplands in NE 1/8, north of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mission Blvd.</td>
</tr>
<tr>
<td>Newberry 15</td>
<td>I 461</td>
<td>complete</td>
</tr>
<tr>
<td>Newberry 15</td>
<td>MF 205</td>
<td>E 116°36'</td>
</tr>
</tbody>
</table>
Newhall 7.5  OF 76-211  complete
Newhall 7.5  B 309  T4N R16W 7-10, 15-22, 27-36
                      T4N R17W 12-13, 24-25, 36
Newhall 7.5  OM 196  S 34°27'  
Newhall 7.5  P 334-H  S 34°27'  
Newman 7.5  B 603  W 121°03'30"
Newport Beach 7.5  OM 193  S 33°41'30" ; E 117°55'
Nicolaus 7.5  OF 79-583  complete
Niles 7.5  MF 429  T3S R1E 32 ; T4S R1E 5, 8, 17, 20
                      T4S R1W 15-17, 20-23, 25-29, 32-36
                      T5S R1W 1-5, 8-17 ; T5S R1E 6-7, 18
Niles 7.5  P 943, pl. 1  T4S R1W 17, 20-22, 26-29, 32-36
                      T4S R1E 8, 17, 20 ; T5S R1W 3-5, 8-11, 13-17
Norden 7.5  GF 39  complete
Norden 7.5  MF 1177-A  T16N R14E 1-2, 11-14
                      T16N R15E 3-5, 8-10
                      T17N R14E 12-14, 23-26, 35-36
                      T17N R15E 8, 17, 20-21, 28-34
North Bloomfield 7.5  GF 66  complete
North Bloomfield 7.5  GF 29  T16N R9E 3-5, 8-10, 15-17
North Chalone Peak 7.5  MF 357  excl. T16S R7E 34-35 ; T16S R8E 31-32
                      T17S R7E 2-3, 10-11, 14-15, 22-23
                      T17S R8E 5  
North Chalone Peak 7.5  OM 24  T17S R7E 25-28, 31-36 ; T17S R8E 31-32
                      T18S R7E 1-12 ; T18S R8E 5-8
North of Oildale 7.5  MF 944  complete
Novato 7.5  MF 574  complete
Novato 7.5  P 943, pl. 2  lowlands, incl. Novato V., San Jose
                      Cr. V., Gallinas V., Santa Margarita V., Sleepy Hollow
Novato 7.5  W 1427  N 38°04'
Oakland East 7.5  GF 193  complete
Oakland East 7.5  GQ 769  complete
Oakland East 7.5  MF 429  incl. urbanized area of Berkeley,
                      Piedmont, Oakland, Alameda
                      excl. Piedmont north of Diamond Canyon & west of Mountain View Cemetery
                      Northeast Oakland south of Diamond Canyon to Lincoln Ave. and area east of Wisconsin Ave. extending
                      southward to junction of MacArthur Frwy. and Warren Frwy.
<table>
<thead>
<tr>
<th>Location</th>
<th>Map</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakland East 7.5</td>
<td>P 943, pl. 1</td>
<td>Urbanized area primarily west of MacArthur and Warren Freeways, but excl. eastern half of city of Piedmont. Also includes Moraga Valley.</td>
</tr>
<tr>
<td>Oakland West 7.5</td>
<td>GF 193</td>
<td>Complete.</td>
</tr>
<tr>
<td>Oakland West 7.5</td>
<td>I 239</td>
<td>Complete.</td>
</tr>
<tr>
<td>Oakland West 7.5</td>
<td>P 943, pl. 1</td>
<td>Complete.</td>
</tr>
<tr>
<td>Oakland West 7.5</td>
<td>MF 429</td>
<td>Incl. urbanized area north of 37°47'30&quot;, east of 122°18' (Berkeley, Emeryville, Oakland). Alameda urbanized area excl. Oakland Naval Supply Center, Oakland Army Terminal, Alameda Naval Air Station and Naval Res. north &amp; east portion of UC Berkeley campus.</td>
</tr>
<tr>
<td>Oakland West 7.5</td>
<td>MF 574</td>
<td>Excl. west of Berkeley High Sch. and S of Univ. Calif. to Technical H.S.</td>
</tr>
<tr>
<td>Oat Mtn. 7.5</td>
<td>OF 76-211</td>
<td>Complete.</td>
</tr>
<tr>
<td>Oat Mtn. 7.5</td>
<td>B 309</td>
<td>N 34°20'</td>
</tr>
<tr>
<td>Oil Center 7.5</td>
<td>OM 196</td>
<td>N 34°19'</td>
</tr>
<tr>
<td>Oat Mtn. 7.5</td>
<td>P 334-H</td>
<td>T3N R16W 1-28; T3N R17W 1,12-13,24</td>
</tr>
<tr>
<td>Oceano 7.5</td>
<td>GF 101</td>
<td>Complete.</td>
</tr>
<tr>
<td>Oil Center 7.5</td>
<td>MF 944</td>
<td>Complete.</td>
</tr>
<tr>
<td>Oil Center 7.5</td>
<td>OF 76-592</td>
<td>Complete.</td>
</tr>
<tr>
<td>Oil Center 7.5</td>
<td>W 1656, pl. 3</td>
<td>S 35°28'</td>
</tr>
<tr>
<td>Oildale 7.5</td>
<td>MF 944</td>
<td>T28S R26E 13,24-25,36; T28S R27E 13-36; T28S R28E 18-19,30-31; T29S R27E 1-16,24; T29S R28E 30</td>
</tr>
<tr>
<td>Oildale 7.5</td>
<td>W 1656, pl. 3</td>
<td>S 35°28'; E 119°02'30&quot;</td>
</tr>
<tr>
<td>Oiler Peak 7.5</td>
<td>MF 944</td>
<td>T29S R31E 25-26,35-36; T29S R32E 31; T30S R31E 1-2,11-14,23-26,35-36; T30S R32E 5-8,17-20,29-32; T31S R31E 1-2,11-12; T31S R32E 5-8</td>
</tr>
<tr>
<td>Oiler Peak 7.5</td>
<td>W 1656, pl. 3</td>
<td>S 35°19'40&quot;; W 118°35'20&quot;</td>
</tr>
<tr>
<td>Ojai 7.5</td>
<td>B 309</td>
<td>Complete.</td>
</tr>
<tr>
<td>Ojai 7.5</td>
<td>OF 76-212</td>
<td>Complete.</td>
</tr>
<tr>
<td>Olanche 15</td>
<td>P 110</td>
<td>Excl. T17S R34E 1,12-13,24-25,36; T17S R35E 18-19,29-33; T18S R34E 1,12-13,24-25,36; T18S R35E 4-9,16-21,28-30</td>
</tr>
<tr>
<td>Olanche 15</td>
<td>P 438, pl. 1 (sh. 3)</td>
<td>Primarily Inyo Co.</td>
</tr>
<tr>
<td>Location</td>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
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<td>---------------</td>
</tr>
<tr>
<td>Old Dad Mtn. 15</td>
<td>MF 205</td>
<td></td>
</tr>
<tr>
<td>Old Man Mtn. 7.5</td>
<td>I 752</td>
<td></td>
</tr>
<tr>
<td>Old Woman Springs 7.5</td>
<td>I 518</td>
<td>complete</td>
</tr>
<tr>
<td>Old Woman Springs 15</td>
<td>I 518</td>
<td>complete</td>
</tr>
<tr>
<td>Olivehurst 7.5</td>
<td>GF 17</td>
<td>complete</td>
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<tr>
<td>Omo Ranch 7.5</td>
<td>GF 3</td>
<td>complete</td>
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<td>Onion Valley 7.5</td>
<td>GF 37</td>
<td>complete</td>
</tr>
<tr>
<td>Onyx Peak 7.5</td>
<td>I 517</td>
<td>complete</td>
</tr>
<tr>
<td>Opal Mtn. 15</td>
<td>P 522</td>
<td></td>
</tr>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Orange 7.5</td>
<td>OM 154</td>
<td>complete</td>
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<tr>
<td>Orchard Peak 7.5</td>
<td>I 757</td>
<td>complete</td>
</tr>
<tr>
<td>Orchard Peak 7.5</td>
<td>I 788</td>
<td>complete</td>
</tr>
<tr>
<td>Orchard Peak 7.5</td>
<td>P 646-C</td>
<td>complete</td>
</tr>
<tr>
<td>Orchard Peak 7.5</td>
<td>P 1082</td>
<td>complete</td>
</tr>
<tr>
<td>Orchard Peak 7.5</td>
<td>B 406</td>
<td>E 120°13'</td>
</tr>
<tr>
<td>Orchard Peak 7.5</td>
<td>B 721</td>
<td>E 120°12'30&quot;</td>
</tr>
<tr>
<td>Orchard Peak 15</td>
<td>P 1082</td>
<td>excl. T27S R16E 4,9-10,14-16,21-28,33-36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orchard Peak 15</td>
<td>I 757</td>
<td>complete</td>
</tr>
<tr>
<td>Orchard Peak 15</td>
<td>I 788</td>
<td>complete</td>
</tr>
<tr>
<td>Orchard Peak 15</td>
<td>P 646-C</td>
<td>complete</td>
</tr>
<tr>
<td>Orcutt 7.5</td>
<td>B 322</td>
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</tr>
<tr>
<td>Orcutt 7.5</td>
<td>OM 14</td>
<td>complete</td>
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<td>Orcutt 7.5</td>
<td>P 222</td>
<td>complete</td>
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<tr>
<td>Orcutt 7.5</td>
<td>W 1664</td>
<td>S 34°50'50&quot;</td>
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<tr>
<td>Ord Mountains 15</td>
<td>I 427</td>
<td>complete</td>
</tr>
<tr>
<td>Oregon House 7.5</td>
<td>GF 18</td>
<td>complete</td>
</tr>
<tr>
<td>Orestimba Peak 7.5</td>
<td>B 603</td>
<td>complete</td>
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<tr>
<td>Oroville Dam 7.5</td>
<td>GF 43</td>
<td>complete</td>
</tr>
<tr>
<td>Ortigalita Peak 7.5</td>
<td>OF 75-394</td>
<td>complete</td>
</tr>
<tr>
<td>Ortigalita Peak 7.5</td>
<td>B 603</td>
<td>E 120°57'30&quot;</td>
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</tbody>
</table>
 Ortigalita Peak 15  OF 75-394  complete
 Ortigalita Peak NW 7.5  B 603  complete
 Ortigalita Peak NW 7.5  OF 75-394  complete
 Oxbrow Bridge 7.5  MF 516  complete
 Oxnard 7.5  W 1619-S  complete
 Owens Peak 7.5  W 2007  complete
 Owens Res. 7.5  MF 945  SW \( \frac{1}{2} \)

To be continued in next issue.

The Map Collection at University of California, Santa Cruz, is in need of some missing maps (as listed below) and is most anxious to replace them. If one of you dear souls out there would be in a position to supply them (or any portion thereof), I would willingly put you at the top of the priority list to receive advance notice of duplicates available (before publication of next list of UCSC duplicates).

Sheets 687 A,B,C,D: Army Map Service Series 1404 (1:500,000) (GSGS 4830)
These sheets cover Yemen.

Please send to: Stan Stevens
Map Collection
University Library
University of California
Santa Cruz, CA 95064

NOTE: These missing sheets resulted from a couple of stupid patrons who obviously thought we could spare them, since we have so many other maps. In the Yemen case, the Prof. actually gave them to his graphic artist who in turn cut-and-pasted them for illustrations in his book.
A VERY SELECT LISTING OF RESOURCES FOR MAP LIBRARIANSHIP
INCLUDING ARTICLES ON RECENT DEVELOPMENTS

by

Constance M. Piquette*

COMPREHENSIVE HANDBOOK OF MAP LIBRARIANSHIP


CATALOGING REFERENCE


CLASSIFICATION REFERENCE


GEOGRAPHIC NAMES IN SUBJECT HEADINGS -- LC CURRENT PRACTICE


- Chapt. 4 - "Geographic Subdivision", pp. 65-69.
- Chapt. 6 - "Geographic Names", pp. 119-138.

MAP CATALOGING MANUALS


-Policies and examples to serve as a starting point for adherence to AACR 2 map cataloging, pending issuance of rule interpretations by the Library of Congress.

EDITOR'S NOTE: The *Draft Manual* is an unpublished work, distributed to Members of the Committee for their use in preparing the final work. According to the June 19, 1981 LC Information Bulletin, the title of

*Constance M. Piquette is Library Assistant-Documents & Maps, Documents Division, Mansfield Library, University of Montana, Missoula, MT 59812. This compilation was prepared for an AACR 2 workshop at the Montana Library Association Convention, Missoula, May 14-16, 1981. She represented the Map Librarianship community on a panel by presenting a report of Mary Larsgaard's update on map cataloging at the WAML meeting in Salt Lake City, and a general discussion of the current state of map cataloging.
the to be published work is: AACR 2 for Cartographic Materials: a Manual of Interpretation. According to the LC Information Bulletin article it is anticipated that the manual, containing 14 chapters, 9 appendixes, a concordance, and index, will be available in early 1982. It will be published by the American Library Association. (see NOTE below)** Myrna Fleming, Chair of WAML's Committee on the Cataloging of Cartographic Materials, represented WAML at the April 27-May 1, 1981 meeting held at the Library of Congress where the manual was finalized.)


-Good practical examples with an index by Rule number.

MAP CATALOGING -- AACR II -- CURRENT ARTICLES


AACR II -- GOVERNMENT DOCUMENTS -- MAPS


-GPO map cataloguers trained for AACR 2 with LC staff in Nov. 1980. The GPO has access to LC map records. All personal and corporate entries are processed through the Name Authorities Cooperative Project. Geographic names used in subject headings are established in conformity to LC guidelines. They are pursuing a goal of LC acceptance of GPO descriptive cataloging for federally issued cartographic materials.

This article also contains excellent guidelines for determining which publications are appropriate candidates for map cataloging and inclusion in a map collection.


-Beginning with the Jan. 1981 issue of the Monthly Catalog the GPO will be using AACR 2. This article describes the particular aspects of their catalog entries that will be most notably affected.

- The Monthly Catalog will be a good source of cataloging data for the greatly expanding numbers of GPO published maps.

COMPUTER TECHNOLOGY AND MAP CATALOGUING

SELECTION AIDS AND BIBLIOGRAPHIES


SELECTION AIDS AND BIBLIOGRAPHIES — SCHOOL AND SMALL LIBRARIES


A short summary of how, what, and how much, to order from the U.S. Geological Survey for a nice compact, but versatile map collection for the small library.

BULLETINS OF THE THREE MAJOR ORGANIZATIONS OF MAP LIBRARIANS


American Library Association. Map and Geography Round Table. (MAGERT) Baseline.

(Vol. 1, No. 1 issued in Dec. 1980. An experimental issue was put out in Fall of 1980 entitled Information Bulletin. The title Baseline has superceded the experimental title.)

**NOTE:** On October 28, 1981, the American Library Association in Chicago responded to my telephone call that the manuscript of the Manual is expected from the AACCMM Secretariat in Ottawa by the end of 1981. It will take about 9 months to prepare the manuscript for publication, depending on its complexity (i.e., number of illustrations and other production requirements that receive special attention). Therefore, the Fall of 1982 will be the earliest that we can expect to see this Manual of Interpretation in print.

The Editor
Publications of Relevance

Contributions by: MB = Mary Blakeley, University of Arizona, Tucson
                 JC = Jim Coombs, Southwest Missouri State Univ, Springfield
                 LC = Larry Cruse, University of California, San Diego
                 PH = Phil Hoehn, University of California, Berkeley
                 PI = Peter Ives, University of Illinois, Urbana
                 EP = The Editor, from Publisher's blurbs & items in hand
                 JP = J.B. Post, Free Library of Philadelphia

Antique Map Calendar, 1982 = Calendrier de cartes anciennes

To celebrate the 75th Anniversary of the National Map Collection,
the Public Archives of Canada is pleased to present this commemorative
cartoographic calendar. The calendar contains colour reproductions of
fourteen original maps from the rich holdings of the National Map Col-
lection in Ottawa.

Published by Rosseau Publishing Corporation Ltd., Toronto, in co-op-
eration with the National Map Collection, Public Archives of Canada,
and the Canadian Government Publishing Centre, Supply and Services
Available at bookstores, including Firefly Books, 3520 Pharmacy Ave.,
Scarborough, Ontario, Canada M1W 2T8

W. Graham Arader III, 1000 Boxwood Court, King of Prussia, PA 19406
2800 Virginiia St., Houston, TX 77098

and Prints

The six-page statement by Donald H. Cresswell and W. Graham Arader III,
included with this Catalogue (86 pages of maps & 77 items randing in
Philadelphia, 1822) to $120,000 (Item 13. Nicolas Sanson, père,
1670. Folio. {etc. The set contains 262 double-page, engraved maps;
....}"

In accord with the Arader Grading System, item 67 is defined as:
Concept—Primal impact, Condition—Very fine (9), Rarity—Mildly scarce.
Item 13 is defined as: Concept—Primal impact, Aesthetics—Superb,
Condition—Fine (0), Rarity—Quite rare.

The value of all items listed is $1,070,275.00 / average $12,591.47.

W. Graham Arader III, {same addresses as above}

Catalogue 30, July 1981: A selection of Reference Books on historical
cartography, natural history, and American Ethnology.
68 x 50 cm. Includes map of Arizona national forests (1:1,250,000) with campground information on verso. free 112 N. Central Avenue, Phoenix, AZ 85004.


Typical entry in Index:

Zuni National Forest, Arizona and New Mexico
affected, Proc. No. 1065, 36 Stat. 2723 (July 1, 1910)
modified, Proc. No. 1064, 36 Stat. 2722 (July 1, 1910)


NASA Contractor Report (NASA-CR-3390) Avail: NTIS HC A03/MF A01 CSCL O3B {Batson is with USGS, Flagstaff, Arizona}
Extensive mapping programs have been completed for the Earth's Moon and for the planet Mercury, Mars, Venus, and the Galilean satellites of Jupiter (Io, Europa, Ganymede, and Callisto), are currently being mapped. The two Voyager spacecraft are expected to return data from which maps can be made of as many as six of the satellites of Saturn and two or more of the satellites of Uranus. ....

Brack, Marion Historic names and places on the Lower Mississippi River. Vicksburg, Mississippi: Mississippi River Commission, 1977. U.S. Army Corps of Engineers. GPO Depository Item No. D103.2:M6912/2

California Department of Transportation. Office of Geometronics. Index of aerial photography. Sacramento, 19{year}

30 leaves; 22 x 28 cm. + 26 leaves of col. maps (41 x 28 cm.) Running title: Title on maps: California aerial photographic coverage. Issued annually. 1980 is latest. Calif. Doc. No. f T940 A5 {year}


3 sheets, 108 x 95 cm. or smaller 1:2,500,000 Covers W93°- W54°/N24°-N5°. Sheet 3 contains legend and tectonic-eomorphic map. OCLC: 7329561 $3.50
CHECKLIST OF PRINTED MAPS of the Middle West to 1900 / Robert W. Karrow, Jr., general editor. Boston, Mass.: G.K. Hall, 1981.
13 v. in 11 maps; 29 cm.

A project of the Hermon Dunlap Smith Center for the History of Cartography at the Newberry Library, in cooperation with several institutions. Includes bibliographies.


Cobb, David A.
$12.00 {to be reviewed in a forthcoming issue} LC No. 78-63588


$25.00 per year. 10 issues per year. ISSN 0011-3514
P.O. Box 399, Milwaukee, Wisconsin 53201

This publication needs little introduction to map librarians. A standard research tool for generations (it is in its 44th volume, since 1938), CGP has always listed new books on geography and related subjects in Section Four (Selected Books and Monographs) and has listed new books and articles according to topic and region in Sections One and Two respectively. Section Three includes references to single maps, maps in books and periodicals, and atlases.

Beginning with the January, 1980, issue, CGP has begun to review selected books. The December 1980 issue (Vol. XLIII, Number 10) includes a review by Howard Deller (AGS Collection Literature Analyst) of the WAML Occasional Paper No. 7: Index to Nineteenth Century City Plans Appearing in Guidebooks, by Harold Otness. (WAML, 1980). {p. 763-4}

Ellison, John W.

Fabiano, E.B. and N.W. Peddie
1 map 65 x 96 cm. ±1:5,000,000 on verso; Hawaii ±1:7,500,000; Alaska ±1:5,000,000 $1.50 OCLC: 6928709

Farrell, Barbara and Aileen Desbarats
$12.50 Association of Canadian Map Libraries, c/o National Map Collection, Public Archives of Canada, 395 Wellington St., Ottawa, Ontario K1A ON3 Canada.

Aileen Desbarats, Map Library, Morisset Library, University of Ottawa, and Barbara Farrell, Map Library, Carleton University, Ottawa, have collaborated in this for ACML - but its application may be used far beyond the borders of Canada. From the jacket:

Most members of the ACML have at some point in their careers been approached by newcomers to the field in search of information and advice. Often, these newcomers have been given responsibility for a small map collection as but one aspect of their daily work, and they lack the training necessary to help them approach their task. The challenge to trained map librarians is to sift and select from their knowledge and experience just enough information and advice to get these newcomers started at a level of operation consistent with the needs of a small collection -- but not to confuse them with too much detail.

In order to facilitate the passing on of this kind of information, the ACML decided to produce and publish a guide containing much of the distilled wisdom of its members. Subjects dealt with include such basic issues as the nature of maps themselves, what makes them different from other library materials and how they are acquired, stored and used. The operation of a limited reference service is described and simple guidelines for the management of the collection are spelled out.


Richard Fitch, Old Maps and Prints, 2324 Calle Halcon, Santa Fe, New Mexico 87501 (505)982-2939


50 x 38 inches. $22.50 FOB New York. Prices range up to $125, depending on mounting. This map shows the location of 2,000 sawmills, plywood, particle-board, hardboard and insulation board mills in the U.S. and Canada. Information is based on the 1979 edition of the Directory of the Forest Products Industry. A geographical index is printed on the sheet.

Book & Map Dept., Forest Industries, 500 Howard St., San Francisco 94105

Forsyth Travel Library. P.O. Box 2975, Shawnee Mission, Kansas 66201

Special 1981-82 Maps Catalog (prices guaranteed through Jan. 1, 1982)

Geo Books (Geo Abstracts) c/o University of East Anglia, Norwich NR4 7TJ


Includes everything through June 1981.

Garrity, Thomas A. and Elmer T. Nitzschke, Jr.


28 x 22 cm. (No. 95 in Circular series) $1.50 (50% disc. to college and public libraries) [Publisher] Publications Room, Campus Station, Socorro, NM 87801 (phone 505/835-5410)


Geologic Age Map of the World

ANSWERS FOR JUNIORS -- Today's question is from Morton Salt:

Morton asks: "How much does it cost to make a map and where does the money come from?"

For the answer, we turn to Information Hotline (ISSN 0360-5817) December 1980, p. 20:

{Information Research Grants and Contracts / official summaries of new NSF-funded projects}

"GEOLoGIC AGE MAP OF THE WORLD, Columbia University, Walter C. Pitman, III, Roger L. Larson, $45,602, 11-1-80 to 4-30-82, OCE-7902981 A01.

The objective of this project is to compile a world map showing the geologic age of crustal rocks beneath the world's oceans, as well as the age of "basement" rock out-crops on the continents and in continental margin areas. This task is an extension of a similar project completed by the same Principal Investigators in 1974. In the five years following this initial effort, there has been a significant increase in the availability of new data from ocean regions, largely as a result of crustal drilling (DSDP) and shipboard magnetics. This new map will be prepared at a scale of approximately 1:23,000,000, which is identical to that of Heezen and Tharp's recently compiled Ocean Floor Panorama."

A chart, as titled above, is available for $3.75 from the publisher at Technology Application Center, University of New Mexico, Albuquerque, NM 87131

32 x 24 inches, printed in brown ink on beige parchment-like paper. It is a combination of artistic drawing, tabular data, and concise textual description of major geologic and evolutionary events.

GOVERNMENT DATA SYSTEMS is published by United Business Publications, Inc.

$10.00 per year US; $16.00 Canada & Foreign. 475 Park Ave South, New York, NY 10016

Volume 10, No. 3 (May/June 1981) includes a feature article on The U.S. Geological Survey in the Age of Digital Electronics. The Newsfronts column includes some city maps.


This new guide comprises a series of 20 strip maps showing detailed bicycle routes between 14 hostels from the Susquehanna River to the Jersey Shore, and from Philadelphia north to the Pocono Mountains. Additional routes connect to all Amtrak stations in the region which accept bicycles as baggage.

Cartography by Robert P. Thomas. $3.50 +.50 post. Make checks payable to AYH and mail to American Youth Hostels, 35 S. 3d St., Philadelphia, PA 19106 (tel. 215/825-6004)

Hecht, Melvin and Richard W. Reeves

164 p. 21 x 30 cm. $12.95 {Publisher} University of Arizona, Tucson, AZ 85721

The focus of this new atlas is Arizona's people. Emphasis is placed on the distribution of Arizona's inhabitants, the origin of this distribution and the evolving relationships of population distribution, both with the lands of the state and with the larger regions. Throughout the atlas sections covering population, the economy, climate, comfort, health, non-climatic amenities, internal organizations, regional setting and changes are fully described and illustrated by a variety of maps. The text was written by Dr. Melvin Hecht of the Department of Geography and Regional Development, University of Arizona, and the maps were produced under the direction of Dr. Richard W. Reeves in the cartographic laboratory of the Department of Geography and Regional Development.

Journal of Environmental Psychology Volume 1, 1981 (quarterly) No. 1 March

$58.00 A new international journal for the study of relationships between people and their physical surroundings. Academic Press.
Landis Aerial Photo. Air photo atlas of — Tucson; Phoenix; San Diego; Denver; Colorado Springs; Dallas; Ft. Worth.

LC 49 x 49 cm. scale varies {San Diego is 1:14,400} prices vary: $200. - $500. depending on size of city. Lithographic; discount for standing orders; about $5 per page; includes index. Annual.

George Guilford, Landis Aerial Photo, 9484 Chesapeake Dr., Suite 802, San Diego, CA 92123 (phone 714/279-3710

MAC Publishing, Inc., P.O. Box 7037, Colorado Springs, CO 80933

Railroad Maps.

JP 344 railroads, 5 volumes, 1108 maps. $12.95 each volume incl. post. Originally prepared for U.S. Department of Transportation.

Volumes are organized as follows:
WEST: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM
PRAIRIE: ND, SD, NE, KS, OK, TX, MN, IA, MO
MIDWEST: WI, IL, MI, IN, OH, WV
EAST: NY, PA, NJ, DE, MD, ME, NH, VT, MA, CT, RI
SOUTH: AR, LA, KY, TN, MS, AL, VA, NC, SC, GA, FL


"... featuring Sergio Aragones's full-color, illustrated, 20" x 30" Mad Map of the U.S.A., with close-up details of Los Angeles, New York, Alaska & Hawaii on the back!"

"MIRTH OF A NATION! Mainly, you'll be in states of constant laughter with Sergio Aragones's "Mad Map of the U.S.A." in "...." Chart a course for your favorite newsstand now!" $1.75

Mundyn, John


The Infoterra network is a mechanism for inter-connecting users of environmental information with sources of such information in their own or other countries. It has focal points in a hundred and ten countries, and has registered some eight thousand five hundred sources of information in seventy-nine countries.

Overbye, Charles

LC Maps of the gold in North Carolina and Virginia are now available, and Overbye is working on ones for Georgia, Alabama and South Carolina.

"There is gold in them thar hills and Charles Overbye wants to help you find it. The hills are the Appalachian Mountains of the Southeastern U.S., and after extensive research, Overbye, an engineer and retired NASA executive, has put together detailed maps of just where that gold is — all the way from Alabama to northwest of Washington, D.C.

The maps cost $6 per state and can be obtained by sending a check to Big Ten, Inc. P.O. Box 1231, Cocoa Beach, FL 32931"
PELLENNORATH. Rod Walker, 1273 Crest Dr., Encinitas, CA 92024

What is PELLENNORATH? It is a publication dealing with the geography of created worlds in fantasy & science fiction literature. It will feature articles, maps, letters, and other materials related to this topic.

Six issues per year are planned. Single issues $1.; subscriptions are 5 issues for $4. Each issue will be approximately 20 5½ x 8½ pages and will be mailed first class. PELLENNORATH No. 1, dated 17 December 1980, is now available.


...Fifty cities, counties, and regional agencies were identified... as having some type of system for handling geographic data. ...Each of these systems is covered individually by a survey form in the Appendix. The concluding part of this section summarizes the inventory, looking at the overall effect of the systems from a statewide viewpoint. Maps and a statistical summary table are used to supplement this section.

California document no. CAL P582 R42

SEIKO QUARTZ

"World Timer Alarm" The future of time travel. Seiko Quartz World Timer with Alarm and World Map. Now Seiko brings you the Time Traveler. A watch that can tell you the time in 19 world times zones at the touch of a button. It's just one of Seiko's new generation of time machines that combine unmatched technology with practical benefits. What's more, Seiko adds an alarm function to make it the complete watch for the man who's going places. It's the only watch like it on earth. Or anywhere else. SEIKO QUARTZ The future never looked so good. {the advertisement does not quote the price}

SnyderScope. P.O. Box 6526, San Diego, California 92106

Mexican Nautical Charts & Publications / for navigating the Atlantic and Pacific Waters of Mexico. Charts and publications issued by the Direcccion General de Oceanografia, Mexico.

Catalog cites publication or chart number, title of same in English, scale, date of issue, and price. Charts are indicated whether in fathoms, feet, meters. Most charts are listed at $10.50 US$. Orders must be prepaid, allow 6 to 8 weeks for delivery. Catalog gives ordering instructions, including shipping charges.

The Washington Ear, Inc.


14 maps with over 230 entries in index. $12. raised-line/Braille set; $5. for large print paper set.
U.S. Department of Agriculture


GPO Depository No. A 1.132:980

U.S. Geological Survey

Geographic Names Information System (GNIS)

All states of the U.S. are to be included in GNIS. Alphabetical finding lists of place names already available on computer magnetic tape for 29 states.

For each feature listed, the file provides information on the official name, the type of feature, location by county and geographic coordinates, variant names, elevation where applicable and the names of USGS topographic maps on which the feature is located.

As each set of place names is compiled USGS is making it available to the public, either on magnetic tape printout or on Microfiche. Eventually the files will be incorporated into the first National Gazetteer of the United States, being prepared by the USGS in cooperation with the U.S. Board on Geographic Names. The National Gazetteer will contain almost 2 million place and feature names. The USGS expects to complete GNIS coverage, and the corresponding National Gazetteer chapters, for all the states and territories sometime in 1982.

As of June 1981 there were 29 States of the 50 available on computer printout, ranging in price from $3.00 to $20.00. Three are available on microfiche at $1.50 each: Colorado (with 28,000 names), Indiana, and Kansas.

Products may be ordered from U.S. Geological Survey, NCIC, 507 National Center, Reston, VA 22092 (phone 703/860-6045). Prepayment is required. The Colorado listing is available from USGS Box 25046, Mall Stop 504, Federal Center, Denver, CO 80225 (telephone 303/234-2326)

U.S. Geological Survey

New Map of Colonial Virginia Now Available; Colonial National Historical Park, Virginia. Reston, VA., U.S.G.S., 1981. 1125,000. $2.00 English and French editions - prepared in honor of the bicentennial of the surrender of Lord Cornwallis, commander of the British troops during the Revolutionary War, to General George Washington, on Oct. 19, 1781, the map sheet includes a large, detailed map of the Yorktown battlefield, a topographic map showing many cultural details in the historic triangle region that includes Williamsburg, Yorktown, and Jamestown.

U.S. Geological Survey


U.S. National Ocean Survey
Published quarterly. Distribution Division C44, National Ocean Survey, 6501 Lafayette Ave., Riverdale, Maryland 20840 (tel. 301/436-6990)
Includes bathymetric maps, marine boundary charts (200 mile limit), marine boundary maps (3 and 12 mile limit), geophysical maps, marine weather service charts, offshore mineral leasing area maps, storm evacuation maps, tidal current charts, topographic-bathymetric maps (the latter are the USGS 1:250,000 topo/bathy editions that are standard USGS products). IHB-GEBCO charts of Alaska are included.

U.S. National Ocean Survey
Dates of Latest Editions/VFR Aeronautical Charts. monthly. (same address as above)
Cites Sectional Aeronautical Charts, VFR Terminal Area Charts, etc. [VFR = visual flight rules] The June 1, 1981 list includes a new VFR Helicopter Chart to add to the 1:250,000 Los Angeles & Vicinity chart which is in its 5th edition (Aug. 7, 1980); 1:500,000 Gulf Coast, U.S. 1st edition (Nov. 27, 1980) $1.60.


Westport Land Records Project, Newsletter of the
Vol. 1, Number 1. 1981. Dane County, Wisconsin & Dept. of Landscape Architecture, University of Wisconsin, 25 Agriculture Hall, Madison, WI 53706.
A cooperative project concerned with developing a cadastral-based computerized data management system for the Township of Westport in Dane County, Wisconsin.

Wilford, John Noble
It was noted in the last issue (p. 303) that this book had been reviewed in the New York Times Book Review (May 3, 1981, p. 3 & 28). This seems to have received more attention than any other book on the history of cartography in the past decade. The New Yorker reviewed it on Aug. 24, 1981 (p. 98), and Newsweek on June 15, 1981 (p. 94).
Wilford is also the author of an article on this subject in Science Digest for October 1981 (pp. 66-73). Accompanying the article are five maps and three satellite infra-red images.

$87.00 ($20. add. for overseas Air Printed Matter shipping)
Includes active mining companies, minerals and metals index, worldwide alphabetical cross-reference, directory of mining executives, equipment buyer guide, and telephone/telex directory.
Meeting of the Executive Committee  
Western Association of Map Libraries (WAML)  
Fall Meeting - September 10, 1981 at  
University House, University of Alberta

A meeting of the Executive Committee was called to order at 10:30am by President Barbara Cox at University House on the University of Alberta campus.

Members present were President Cox; Riley Moffat, Vice-President; Stan Stevens, Treasurer; Janet Collins, Secretary; David Lundquist, Past-President; Ron Whistance-Smith, and Donna Koepp.

FUTURE MEETINGS

The Spring 1982 meeting will be held March 25 and 26 at Stanford University in Palo Alto. Hostess will be Karyl Tonge. Larry Carver at U.C. Santa Barbara has accepted the suggestion that he host the Fall 1982 meetings. No tentative dates have been set as yet.

TREASURER'S REPORT AND PUBLICATION COSTS

The treasurer's Report was given by Stan Stevens. It was noted that it was a good decision to overprint the workshop manual. It is sold out and is now out of print. A major expense this past year has been the printing of occasional papers. Work is in progress on Occasional Paper #6 and is a high priority for publishing before the first of the year.

PUBLICATIONS COMMITTEE

Peter Stark, Central Washington University, has been appointed to fill the vacancy on the Publications Committee. The Publications Committee will look into publishing an "Index to Geologic Mapping in California".

ENDOWMENT FUND

An anonymous donor has offered $200-$300 to establish an endowment fund. WAML will accept the offer and pursue tax exempt status.

MAGERT EXECUTIVE COUNCIL

David Lundquist reported on the Magert Executive Council meeting and has submitted his resignation as WAML representative. Donna Koepp has been appointed to fill the position for a year.

CATALOGING COMMITTEE

The possibility of holding a cataloging workshop after a WAML meeting was discussed. It was suggested that the workshop be
delayed until the cataloging manual by Richard Fox and John Schroeder is published by ALA. The projected date of publication and status of the manual will be checked on. Availability of space the day after the Spring 1982 meeting will also be checked into.

SPECIAL PROJECTS

Stan Stevens suggested that WAML initiate a special project to encourage membership involvement. A membership-map resource directory was suggested and will be presented to the general membership at the afternoon meeting.

The Executive Committee meeting was adjourned by President Cox at 12:25pm.

Respectfully submitted,

Janet Collins
Secretary

ATTENDANCE AT WAML EDMONTON MEETING SEPTEMBER 10-11, 1981

M. K. Aubrey, Provincial Archives of Canada, Edmonton
Robert Batchelder, University of Calgary, Calgary
Del Bordine, Superior Oil Corporate Library, Calgary
Kirsty Burt, Student, Graduate Studies, University of Alberta, Edmonton
Janet Collins, Western Washington University, Bellingham, Washington
Barbara Cox, University of Utah, Salt Lake City
Kim Davis, Independent Cartographer, Edmonton
Herbert Fox, California State University, Fresno
Peter Harvey
Steven Hiller, University of Washington, Seattle
George Ilinsky, Arizona State University, Tempe
Donna Koeppe, Denver Public Library, Denver, Colorado
Mary Larsgaard, Colorado School of Mines, Denver, Colorado
David Lundquist, University of California, Davis
Tomislav Milinusic, Athabasca University, Edmonton
Riley Moffat, Brigham Young University, Provo, Utah
Vera Raschke, Boreal Institute, University of Alberta, Edmonton
Lou M. Sebert, Surveys & Mapping Branch, Dept. of Energy, Mines & Res., Ottawa
Gerald Stark
Stanley D. Stevens, University of California, Santa Cruz
Iain Taylor, Professor of Geography, Athabasca University, Edmonton
Ronald Whistance-Smith, University of Alberta, Edmonton
Lillian Wonders, Professor of Geography, University of Alberta, Edmonton

GUEST SPEAKERS:

Ed Kennedy, Director of Mapping, Alberta Bureau of Surveys & Mapping, Edmonton
William C. Wonders, Professor of Geography, University of Alberta, Edmonton
MINUTES
General Meeting
Western Association of Map Libraries (WAML)
Fall Meeting - September 10-11, 1981
University of Alberta, Edmonton

The meeting was convened Thursday, September 10, 1981 at 1:20pm at University House on the University of Alberta campus. Barbara Cox, WAML President, welcomed the participants and introduced R. Geoffrey Ironside, chairman of the Geography Department. Ron Whistance-Smith, host for the meeting, discussed dinner arrangements and mentioned the availability of duplicate maps. He also mentioned that an exhibit on the History of Swiss Cartography was set up for viewing, and is now a permanent part of the University of Alberta Map Collection. Changes in the program were noted.

WAML Business Meeting

The business meeting followed introductions. The Executive Committee meeting minutes were read by Janet Collins, Secretary. Stan Stevens followed by suggesting that an AD HOC Committee be formed to devise a questionnaire to compile a directory of map collections within our region; the level of which to be determined. The project would hopefully motivate WAML members to get more involved in activities of WAML. Interested members should contact Barbara Cox. Stan Stevens then gave the Treasurer's report. He noted that the Income-Expense Report will be published in summary form in the next WAML Bulletin. The report included information on last year's cost of publishing Occasional Papers, the status of Occasional Paper Sales, and noted that reviews are helpful in sales and that additional publicity will be pursued. Barbara Cox then noted that the WAML Spring 1982 meeting will be held March 25 and 26 at Stanford University. Karyl Tonge will be hostess. Larry Carver has accepted the invitation to host the Fall 1982 meeting at U.C.Santa Barbara. No tentative dates have been set. Stan Stevens noted that members can obtain Occasional Papers at a 40% discount. Ron Whistance-Smith mentioned that the WAML Bulletin take two months to arrive. It was determined that the Bulletin can be sent first class and the member billed for the difference in postage.

Sounding Board

Mary Larsgaard mentioned that the United Nations is still looking for a Map Librarian. Contact Mary or Christine Windheuser for additional information.

Steve Hiller noted that Anna Chiong, Librarian, University of Washington Geography Department, will be retiring December 31st.
Lou Sebert, Surveys and Mapping Branch, Department of Energy, Mines and Resources mentioned a boundary dispute between the U.S. and Canada (territorial limits) in the Georges Bank area of the Gulf of Maine. It may possibly result in the production of two atlases showing historical maps of the area.

Ron Whistance-Smith mentioned that an "Antique Map Calendar" for 1982 is available from the Canadian Ministry of Supply.

Mary Larsgaard announced that the Cataloging Manual will hopefully be going to press in September. Additional information is available from Mary Alice Treat.

Steve Hiller mentioned that a survey of the condition of maps in the University of Washington has been recently completed. The survey was based on 1) internal composition (chemical properties of paper), 2) external use and 3) the housing of the material. Results: 20% good, 70% fair, 10% poor.

Ron Whistance-Smith announced that the Association of Canadian Map Libraries (ACML) is preparing a directory of Canadian Map Libraries.

Barbara Cox is interested in knowing if other WAML members have been approached by NCIC to transfer records onto their forms and assist them in preparing a National Cartographic Catalogue.

Members were encouraged to write Congressmen for funding beyond this fiscal year for the National Atlas project.

Lou Sebert and N.L. Nicholson have co-authored Maps of Canada which traces the development of mapping programs in Canada. It is available through Arcon Press in Hampton, Connecticut.

Map of Benicia

The first presentation was given by David Lundquist, U.C. Davis, and centered on a 1850-51 map of Benicia, California. He pointed out that very little is known about the cartographer Benjamin W. Barlow. David noted that the map is significant for a number of reasons. It predates the gold rush, Benicia was one of the early capitals of California, it was a major military facility, it was a planned and promoter-inspired community, it was hoped that California would be a starting point for the gold fields, and it also gave a glimpse of hopes and dreams of the time. He concluded the presentation by mentioning his difficulty in locating information about the cartographer and map and requested input from the audience.
Resource Mapping In Calgary

The next presentation was given by Bob Batchelder of the University of Calgary, Map and Airphoto Division. He traced the history of Calgary and noted that the city is growing rapidly. Bob also mentioned that most Canadian oil and gas is located in Alberta. As a result, much mapping is done. Air photos are often used to update the maps. Bob then reviewed map companies and the type of maps produced.

The Thursday session was adjourned following this presentation. The evening was finished off with a good Greek Dinner, complete with entertainment, and a tour of Edmonton by night.

Mount St. Helens Aerial Photography

The first Friday presentation was given by Steve Hiller, Map Librarian, University of Washington. He traced the history and events leading up to the eruption and after through use of aerial photography. Steve noted that air photos are easy to store, easy to acquire and are fairly inexpensive. He examined four aspects of the eruption. Those included; change in the mountain form, crater and dome building, hydrology of streams and lakes, and an overview of the blast area. (The air photos were later available for viewing with stereoscopes.)

Geographical Mapping in the Canadian Arctic

Dr. William Wonders, Geography Department, University of Alberta gave the next presentation. He traced mapping in the Canadian Arctic and noted its link to historical explorations. Dr. Wonders mentioned that Canadians were among the first to use aerial photos for mapping, and that computers and remote sensing provide much assistance to mapping. He also noted that important factors in mapping the Canadian Arctic have been; climate, distance, and the remoteness of the area.

Telidon

The next presentation was given by Tomislav Milinusic and Don Cowper, both of Athabasca University. They discussed the computer applications of the Telidon system in examining Historical Cartography. Don discussed the capabilities of Telidon and Tomislav detailed its use in a study of Cyprus he had started about two years ago. The study established a method of evaluating historical discoveries through cartographic materials. He examined thirteen historical maps of Cyprus and was able to determine through the use of Telidon the accuracy of the coastal outlines of the maps. He concluded that the methodology has some value, perhaps looking at other islands, and that it would be interesting to rewrite the history of discovery through one of these approaches.

The session was then recessed for lunch.
Air Photos: Importance, Storage, Handling, Access

The afternoon session began with a presentation by Ron Whistance-Smith, Curator, University of Alberta. He emphasized that air photos are essential companions to maps, and that in many cases are better than a map because they are a complete document. Ron also mentioned their applications, their wide range of uses, and different types of air photo products. Discussion followed on storage, classification, and indexing. Air photos at the University of Alberta are arranged by scale, the NTS number, and year. Ron concluded by mentioning that Landsat Mosaics of Canada at 1:1,000,000 can be purchased from the National Air Photo Library.

Canadian Federal Mapping

Lou Sebert of the Surveys and Mapping Branch, Department of Energy, Mines and Resources spoke next on federal mapping. He explained the type of maps published by each branch, and mentioned that the Canada Map Office is capable of distributing maps by all branches but that some agencies choose to distribute their own for various reasons. Mr. Sebert also noted that the Department of Energy, Mines and Resources does printing for other government agencies. He mentioned that the Canada Map Office distributes a "List of Publications" on paper copy and via microfiche which is available from Ottawa. The Canadian government hopes to have the 1:50,000 topographic series finished within the next decade. They have stopped working on the 1:25,000 topographic series because most all of the provinces have active mapping agencies producing large scale topos.

Trends in Provincial Mapping

The final presentation was given by Ed Kennedy, Director of Mapping, Alberta Bureau of Surveying and Mapping. He reviewed the status of mapping for each province, digitizing, the scales mapped, source of funding, percentage completed, and expected date of completion for the different series.

Adjournment

The meeting was adjourned by President Cox at 4:30 p.m. Most participants were able to attend dinner provided by Ron and his family at their home later in the evening. We all greatly appreciated Ron's hospitality, efforts, and organization, which provided for a most successful and interesting fall meeting.
**INCOME-EXPENSE REPORT**

WESTERN ASSOCIATION OF MAP LIBRARIES

* For Period
  Fiscal Year July 1, 1979 thru June 30, 1980


  Date June 30, 1980

  Previous Balance... $3,113.63

**INCOME**

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<td>Davis Registration</td>
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**TOTAL INCOME** $7,384.17

**EXPENSE**

| Information Bulletin Production Expense | $3,848.37 |
| Treasurer's Expenses: Invoices, Printing, Postage, etc. | $505.85 * |
| Kroytype Lettering Machine & supplies | $1,166.71 |
| WAML Meeting Expense: Tucson (net loss $50.18) | $1,122.94 |
| Davis (net loss $33.80) | $378.80 |
| WAML Committee Expense: Nominating Committee post etc | $28.63 |
| Membership & Hospitality | $8.10 |

* Includes $11.05 Sales Tax Remitted to State of Calif.

**TOTAL EXPENSE** $6,959.40

**NET BALANCE (A+B−C)** $3,492.21

Submitted by Stanley D. Stevens
Stanley D. Stevens, Treasurer & Editor of Publications

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**Sale of Occasional Papers:**

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The sale of 53 remaining copies of the Cataloging Workshop Manual, produced for the Tucson Meeting, Oct. 25-27, 1979, provided the needed income to bring WAML in line with expenses for the meeting. The Cataloging Workshop Manual is now Out-of-Print.
INCOME-EXPENSE REPORT  
WESTERN ASSOCIATION OF MAP LIBRARIES

For Period: Fiscal Year July 1, 1980 thru June 30, 1981  
Date: June 30, 1981

and Volume 12 of the Information Bulletin

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TOTAL INCOME: $10,703.82

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TOTAL EXPENSE: $9,176.79

NET BALANCE (A+B-C): $1,527.03

Submitted by Stanley D. Stevens  
Stanley D. Stevens, Treasurer & Editor of Publications

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