

14-00

information Bulletin



14-00

WESTERN ASSOCIATION OF MAP LIBRARIES

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

Information Bulletin

VOL. 7, NO.1

NOV. 1975

Western Association of Map Libraries

Contents

John Thornton: Hydrographer, 1641 - 1708, by Coolie Verner	3
Duplicate Item Available	9
New Mapping of Western North America, by Sue Trevitt, Barry Gardner-Smith, Mary Blakeley, & The Editor	10
Railroad Maps of the United States: A Review, by Thomas Nelson	18
<u>WAML/SLA Geog & Map Div. - Joint Meeting, Denver - Prelim. Programme</u>	<u>21</u>
Map Scale Indicator . . . Meteorite Craters	22
Catalogues	23
Job Opening . . . News Notes	27
Mexico's CETENAL: La Comision de Estudios del Territorio Nacional, by P. R. Martinez-Perry	33
Bench Marks!	36
New Acquisitions List	37
Society for the History of Discoveries	38
What is an Historical Map?, by Bernice Kimball	38
Pirate and Treasure Atlases, by Donald A. Wise	41
<u>The Globe, Journal of the Australian Map Curators' Circle, A Review,</u> by Mai Treude	<u>45</u>
<u>Proceedings of the AMCC Seminar and Workshop</u>	<u>46</u>
<u>Geoscience Information, Proceedings of the Geoscience Info. Society</u>	<u>47</u>
Association of Canadian Map Libraries, a report, by Frances Woodward	48
Wanted: Map Librarian Position	49
Map Library Floor Plans, a new publication of ACML	50
ACML Executive & Committees 1975-6; & <u>Proceedings</u> , 8th ACML Conf.	51
Maps and the Teaching of Urban Geography in British Columbia, by L. J. Evenden	52
<u>Guide to U.S. Government Maps</u>	<u>57</u>
Publications of Relevance, contributions by Anna Blustein, Nancy M. Kline, Mary Galneder, John Schroeder, & The Editor	58
New Titles, Briefly Noted, by Edward P. Thatcher	63
<u>World Atlas of Food: A Review, by Marjorie R. Henry</u>	<u>64</u>
Atlases Cataloged at U.C.L.A., by Anna F. Blustein	65
WAML List of Members & Subscribers - Since July 1, 1975	68
WAML Income-Expense Report, 1974/1975	70

The Information Bulletin is published by the Western Association of Map Libraries, but opinions expressed herein do not necessarily reflect an official position of the Association.

Membership in WAML is open to any individual, institution, or business interested in furthering the Purpose of the Association (to encourage high standards in every phase of the organization and administration of map libraries).

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

Principal Region

Alberta
British Columbia

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

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

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

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

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

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

Editor: Stanley D. Stevens
University Library
University of California
Santa Cruz, CA 95064 (phone ac408/429-2364) (ATSS 529-2364)
Geo Abstracts, Part G;

The Information Bulletin is indexed in Library Literature, and Library and Information Science Abstracts; Surveying and Mapping/American Cartographers; and, IREBI [Indices de Revistas de Bibliotecologia] (Argentina).

COPY DEADLINES: # 1 - October 1st; # 2 - February 1st; # 3 - May 1st.

US ISSN 0049 - 7282

LC # 72 - 625238

JOHN THORNTON: HYDROGRAPHER*1641 - 1708

by

Coolie Verner
University of British Columbia

Coastal charting in England began during the reign of Henry VIIIth principally for reasons of defense, and it was well into the reign of Elizabeth Ist before navigational charting of the coast occurred.¹ English chartmaking did not develop systematically until a school of chartmakers began to emerge at the end of the sixteenth century. This school originated with John Daniel in 1590 and continued until 1711 in an unbroken line of master-apprentice relationships under the aegis of the Worshipful Company of Drapers.² During this period many, but not all, of the leading "seacard drawers" in England were in the Drapers' School.

The charts produced in England during the early part of the seventeenth century were almost exclusively in manuscript and few of them have survived. During much of the century England lacked a viable chart printing trade although map printing was developing slowly.³ Some chart books had been published in London - notably the English translation of Waghenauer issued in 1588 and Joseph Moxon's Book of Sea Platts published in 1657.

The production of printed charts was retarded partly by the scarcity of engravers skilled in map and chart work but principally by the ready availability and superiority of the charts produced by the great Dutch firms such as Bleau, Janssen, Doncker, or Colom. These firms held a world monopoly on the production of charts for most of the century.

The first major attempt to compete with the Dutch was made by John Seller, an instrument maker. In 1668 he published a chart book that eventually became The English Pilot in six volumes but not because of Seller himself.⁴ The charts in this first volume were printed from old Dutch plates made originally in 1620 and long abandoned by their owner. Never-the-less, it was Seller who finally broke the Dutch monopoly and opened the way for an English chart trade to become established when he managed to enveigle a Royal Privilege from Charles II in 1671, which banned the import of Dutch charts and chart books for thirty years. In doing so it produced the curious anomaly of depriving English mariners access to the reliable and modern charts produced by Dutch publishers in order to protect charts printed in England that were actually from obsolete plates long abandoned by their original Dutch publisher.

II

The first English chartmaker to publish his own work successfully was John Thornton. Curiously, Thornton is largely ignored by historians and has never received his rightful place in the evolution of English cartography. Virtually nothing has been written about Thornton and much of what has been done is erroneous. John Thornton's signal contribution to the development of English

* Presented to the combined meeting of the Western Association of Map Libraries and the Association of Canadian Map Libraries, Vancouver, May 8, 1975.

4 cartography and the history of the chart trade lies in his successful transition from manuscript to printed charts. It was he who translated and adapted the long established cartographic traditions of the Drapers' School to the new medium of printing which led to the establishment of a chart printing trade that eventually displaced the Dutch as world leaders.

John Thornton was born in the Parish of St. Botolph's, Aldgate and baptised on October 8, 1641. His parents were John and Ann Thornton of Tower Hill and later of East Smithfield. The senior John Thornton was a cutler known particularly as a razor maker, and he had four children. The first child, Ann, was baptised in December 1639. She was followed by John, then by Joseph, and finally by the youngest child, Peter, who was baptised August 18, 1650.⁵

On November 19, 1656, at the age of fifteen, young John Thornton was apprenticed to John Burston the chartmaker, in the Drapers' Company.⁶ Burston had been apprenticed to Nicholas Comberford in 1628 and made a freeman in 1638. In January 1665, John Thornton received the freedom of the Company and in that same year his younger brother, Joseph, was apprenticed to Burston. Nothing further is known of this brother.

Three years after receiving his freedom, John Thornton accepted his own apprentices. One of these was his younger brother Peter who was apprenticed on September 9, 1668 at the age of eighteen. He too appears not to have completed his term and nothing further is known of him. The second apprentice accepted that year was Joel Gascoyne, son of a sailor from Hull, who received his freedom on February 9, 1676. Gascoyne had apprentices and continued the line of chartmakers in the Drapers'. He became noted as a surveyor, chartmaker and engraver until his death in 1705. John Thornton accepted a third apprentice, Anthony Fitzhugh, in 1675 and he is known to have made charts from 1683 to 1697.

John Thornton continued to be active in the Drapers' Company and is noted for Quarterage Payments from 1665 to 1675. He was made a Liveryman in 1703.

FAMILY

John Thornton married Ann Boulton in St. Botolph's on June 23, 1664 with Mr. John Markornos officiating. Both the bride and groom are listed as being from Whitechapel Parish at the time. They are known to have had two daughters and two sons but their dates of birth have not been found and little is known of them. The eldest daughter Ann married Isaac Gray in 1691 at St. James' in Duke Place and they had one daughter also named Ann. The second daughter, Sarah, was married on January 3, 1693 in St. Catherine's by the Tower to Henry Davis and they had six children - Thomas, John, Henry, Martha, Sarah, and Mary. Sarah Thornton pre-deceased her father by several years but Ann survived him.

Of the two sons, Samuel and Macabees, the former succeeded to his father's business while the latter died in Enfield, Middlesex in July 1708.⁷ Samuel married Mary Grase in 1686 in St. James', Duke Place with Mr. Will Ravenhill officiating. He operated the family business until his death in 1715 and produced a number of charts and chart books as well as new editions of works published originally by his father. Samuel became a member of the Drapers' by patrimony in 1709.

After his first wife's death, John Thornton married Ann Greenleaf on March 31, 1694 in St. Catherine's by the Tower but she died before her husband. At the age of 67, John Thornton died and was buried from St. Botolph's on January 23, 1708.

WILL

John Thornton was a man of substance at the time of his death. In his will⁸ he specified that all his "...Maps, Charts, Copys, Books, Instruments, Copper graved Plates and all other Things belonging to my Calling and an Annuity of Twenty pounds per Annum..." were to go to his son Samuel who had worked in the business with him. An annuity of thirty pounds per annum plus two hundred pounds to be put out at interest were left to his daughter Ann with strict instructions that her husband was to be excluded from "...having anything to do therein or inter-medling therewith...". To his son Macabees he left six hundred pounds and to his grandchildren by his daughter Sarah Davis he left twenty pounds each. His maidservant, Ann Beasley, received forty shillings and the residue of his estate was to be divided equally among his three surviving children.

John Thornton had invested his money in the so-called "Million Lottery" of 1694 which was a scheme initiated by the government that promised a return of the capital invested with a 60 percent increment. Investors had some difficulty in collecting their due so Thornton's heirs may not have received their shares.⁹

When Macabees Thornton died in July 1708 he did not leave a will and his estate was administered by his brother Samuel.¹⁰ Similarly, when Samuel died in the fall of 1715, he too left no will and his estate was administered by his surviving sister with the proceeds going to his nieces and nephews.¹¹ In settling this estate, the stock of maps and plates were acquired by the firm of Mount and Page who continued to issue the original Thornton publications through the eighteenth century.¹²

III

Nothing is known of John Thornton in the two years following his freedom in the Drapers' Company. The earliest manuscript chart known is dated 1667 and lists his address as "East Smithfield Neare Tower Hill." Later on he listed himself as "at the Dyal in the Great Minories" and his final address was "at the Signe of England, Scotland, and Ireland in the Minories" which he often reduced to the Platt when he lacked sufficient space in an imprint.

It is quite possible that Thornton spent those two years acquiring the skills necessary for engraving on copper in order to publish his own charts. There is no certain evidence such as a signed plate to indicate that Thornton did engrave his charts but circumstantial evidence lends credence to that conclusion. In the literature there is only one positive statement that he did engrave his plates. Professor E.G.R. Taylor¹³ notes that Narborough's chart of the Straits of Magellan was "...engraved by John Thornton and published in 1673." As usual, she fails to provide any evidence to support her statement so that it must be discounted.

Of the some 80 plates which Thornton made for The English Pilot, 91 percent are not signed by an engraver. Those that are signed were cut by such noted men as Francis Lamb, James Clark, or Sutton Nichols who would most cer-

tainly have signed any copper plates for which they were responsible. The unsigned plates have Thornton's name in the imprint so there was no need to also sign the plate as engraver.

There is a simplicity and consistency in style that is persuasive that the plates were cut by a single hand. It is not until the turn of the century that variations become obvious and this was due to the fact that Thornton was old and his hand shaky. These differences are probably due to the fact that Samuel Thornton was active in the work as has been verified by Tony Campbell who found a chart dated 1701 and signed by John Thornton but in the hand of his son Samuel.¹⁴

In addition, map engravers usually chose the decorative material on the plate. In most series of charts executed by one or more engravers there were variations in cartouche designs such as on the charts by Greenville Collins published in 1693.¹⁵ Thornton's charts, however, tend to use the same design for the cartouche frame and rarely added other decorative features. This is in keeping with Thornton's general style of chart construction and suggests that he did the engraving.

The larger map publishing firms operating in London in the eighteenth century, had their own captive engravers but this is not likely to have happened in Thornton's time when the chart publishing trade was not yet firmly established.

Additional circumstantial evidence lies in the existence of a number of charts signed by Joel Gascoyne as engraver. The earliest plates known to have been engraved by Gascoyne were published in 1677, the year after he received his freedom, and these must have been working during 1676.¹⁶ Since Gascoyne was apprenticed to Thornton one would assume that he acquired the skills of engraving from his master during his apprenticeship. Furthermore, Samuel Thornton is known to have produced at least fourteen charts under his own name and none of these are signed plates which suggests that he too learned engraving from his father.

Although there is no positive evidence that Thornton did engrave his own plates, the circumstantial evidence noted above appears to support that hypothesis. It is this transition from manuscript to engraved chart that gives John Thornton such a prominent role in the development of the English chart trade.

In his lifetime John Thornton produced an array of manuscript and printed charts that are not yet completely inventoried. Some forty manuscript charts have survived and well over one hundred printed charts are known. Some of his printed charts -- particularly those for the Oriental navigation -- are exact copies of manuscript charts that have survived.¹⁷ Thornton is the only chartmaker known to have issued charts in both forms simultaneously.

Like most chartmakers Thornton drew his information from any source available to him. He is known to have made precise copies of charts printed by the Dutch firm of Bleau while other charts were constructed from information brought by mariners returning from voyages to distant lands. In any case, Thornton attempted to make his charts as accurate as existing knowledge would allow. He often prepared a new manuscript draught or altered a copper plate when new information indicated that a change was necessary. A chart of Virginia

was altered four times while he was publishing it to reflect new information about shoals and dangers.¹⁸ Unfortunately, his successors Mount and Page were less conscientious for they rarely altered a plate to reflect changes in knowledge.

IV.

Although John Thornton signed himself as Hydrographer to the Hudson's Bay Company, there is no evidence in the archives of the Company that he held such an appointment officially. It is known that he made charts and maps for the Company and published a chart of Hudson's Bay about 1677.

Commerce with North America was increasing and this accelerated the demand for charts of American waters. At that moment, Thornton was the best chartmaker available in London to meet this growing demand for charts. In addition to the ones of Hudson's Bay, he also published a large chart printed on four sheets that detailed the coast from New York to Virginia. No copies of the first state of this chart are known.

As a result of the demand, Thornton joined with William Fisher in producing the first English Marine Atlas of North America published in 1689 as The English Pilot. The Fourth Book.¹⁹ This volume had been started by John Seller in 1675 but he managed to print only the first twelve pages. These were acquired by William Fisher in 1679 when ownership was transferred to him in the Stationer's Register. The volume produced by Thornton and Fisher had some twenty-three charts made by Thornton that detailed the coast from Hudson's Bay to Guinea and included the West Indies.

Thornton also signed himself as "Hydrographer to the Honourable East India Company" but again there is no evidence in the archives of that Company that he held such an appointment officially, nor, in fact, is there any evidence that he made charts for or sold them to the Company. It is known that his charts were aboard vessels sailing to the Orient but they were probably bought by the Masters personally as was customary at the time.

Again the demand for manuscript charts prompted Thornton to publish a volume on the Orient in 1703. This was the Third Book of the English Pilot²⁰ and as with the Fourth Book it had been started by John Seller in 1675. In this case Seller managed to print twenty-four pages before abandoning the project although he did release a few incomplete copies. One of these copies came into the possession of John Dalrymple who compared it in 1807 with Thornton's edition and noted of Thornton's that "A more barefaced Plagiarism I have not seen."²¹

In fairness to Dalrymple, he was not then aware of the facts in the case but he did initiate a myth that has been continued since by others to the detriment of Thornton's reputation. This myth is perpetuated in current library practice in that the main entry for all six volumes of The English Pilot is under the name of John Seller in spite of the fact that he produced only the first two original volumes.

Both the third and the fourth books of The English Pilot were republished through most of the eighteenth century by the firm of Mount and Page. The Third Book is known in eleven editions issued from 1703 to 1761 and the Fourth Book in forty-two editions from 1689 to 1794. During those years there was virtually no change in the text and many of the original Thornton plates were used to print the charts.²²

John Thornton was also involved in publishing other items of maritime interest but none of these were as important as his two volumes of The English Pilot. He was involved in publishing single maps and charts with many of his contemporaries including Robert Morden, Phillip Lea, and Robert Greene. He was often consulted by Samuel Pepys who on one occasion asked Thornton to compare Greenville Collins' Coasting Pilot with the Neptune Francois and "the Waggoner" to determine which was the most accurate.²³

Maps drawn by Thornton were used in the negotiations between England and France leading to the Treaty of Utrecht in 1713 and he was involved in the first map of the City of Philadelphia. This was published before the city itself was in existence as a prospectus to entice potential settlers. Thornton's actual role in producing this map is not clear, as the imprint notes: "by Thomas Holme Surveyor General Sold by John Thornton in the Minories and Andrew Sowle in Shoreditch."²⁴

In 1789 John Dalrymple noted that Thornton "...was the successor in business to the earlier Hydrographers of the former century, and seems to have been in possession of many manuscripts of which no traces remain but in his works."²⁵

V.

John Thornton was certainly the most important chartmaker in England at the end of the seventeenth century yet he is the least known and appreciated. He has been overshadowed by John Seller in the mistaken assumption that it was Seller rather than Thornton who was responsible for the beginning of the English map trade.

As a cartographer, Thornton embodied the accumulated wisdom and skill of the Drapers' School but he was also a man of his own time. He moved English chartmaking from individual to mass production and introduced a simplicity and clarity to charts unencumbered by ornamentation or stylistic complexities. In this, he served the eighteenth century as Aaron Arrowsmith did the nineteenth by emphasizing functionalism in cartographic production.²⁶ Both men were innovators in their day and contributed significantly to the map and chart trade.

FOOTNOTES

1. J.B. Harley, "Maps for the Local Historian, A Guide to British Sources. 5 Marine Charts." The Local Historian, 8:86-97 (1968).
2. Tony Campbell, "The Drapers' Company and its School of Seventeenth Century Chart-Makers." In: My Head is A Map. Edited by Helen Wallis and Sarah Tyacke. (London, 1973) pp.81-106.
3. R.A. Skelton, Country Atlases of the British Isles 1579-1703. (London, 1970). pp. 231-250.
4. Coolie Verner, "John Seller and the Chart Trade in the Seventeenth Century England." (In press, Clark Library, Los Angeles.)
5. These data on the family are derived from the Parish Records of St. Botolph now in the Guildhall Library. Baptisms are found in Ms.9224, Marriages in Ms.9229, and Burials in Ms.9226.
6. Records of the Worshipful Company of Drapers' with permission. See also: Tony Campbell, op.cit.
7. Archdeaconry Court, Wills, Ms.9050/19, p. 72. in the Guildhall Library.

8. P.R.O., P.C.C. 1707 Barrett Folio 23.
9. See: C. L'Estrange Ewen, Lotteries and Sweepstakes. (London, 1932), pp. 127-130. This information was supplied by Mr. Ralph Hyde of the Guildhall Library.
10. Archdeaconry Court, Wills. Ms.9050/19, p. 72.
11. ibid., Ms.9050/20, p. 193.
12. This has been determined from the subsequent use of the map plates by Mount and Page.
13. E.G.R. Taylor, The Mathematical Practitioners of Tudor and Stuart England. (Cambridge, 1954), p. 382.
14. Campbell, op.cit., p. 94.
15. Coolie Verner, Captain Collins' Coasting Pilot. Map Collectors Circle, No. 58. (London, 1969).
16. Several charts in The English Pilot ... Mediterranean published after July 24, 1677 were engraved by Gascoyne.
17. M. de la Roncière, "Manuscript charts by John Thornton, hydrographer of the East India Company." Imago Mundi, XIX (1965), 46.50.
18. Coolie Verner, A Carte-Bibliographical Study of the English Pilot. The Fourth Book... (Charlottesville, 1960).
19. This edition was reproduced in 1967 in the T.O.T. series of facsimile atlases.
20. This edition was reproduced in the T.O.T. series in 1970.
21. Quoted in Phillips 3455.
22. Coolie Verner, The English Pilot... A Preliminary Checklist of Editions 1671 to 1803. Map Collectors Circle (London, in press).
23. J.R. Tanner, editor, Samuel Pepys's Naval Minutes. (London, 1926).
24. Emerson D. Fite and Archibald Freeman, A Book of Old Maps. (Cambridge, Mass., 1926, reprinted New York, 1969) No. 44.
25. John Dalrymple, Memoir of a Map of the Lands Around the North Pole. (London, 1789). p. 14 note.
26. Coolie Verner, "The Arrowsmith Firm and the Cartography of Canada." In: Proceedings, Association of Canadian Map Libraries, June 1-3, 1970. Also in: The Canadian Cartographer 8:1-7 (1971).

DUPLICATE AVAILABLE

The University of Ottawa General Library has the following item available exchange or gratis:

U.S. Department of Agriculture.

The public domain of Nevada and factors affecting its use,
by E.O. Wooton. Washington, Department of Agriculture, 1932.

52 p., 2 maps folded; 23 x 15 cm. (Its Technical Bulletin 301.)

Write: Velma Parker, The General Library, University of Ottawa, Ottawa, Ontario, Canada K1N 6N5.

NEW MAPPING OF WESTERN NORTH AMERICA

Contributions by: Sue Trevitt, University of Oregon; The Editor;
Barry Gardner-Smith, Scripps Institution of Oceanography;
Mary Blakeley, University of Arizona.

WASHINGTON

Washington (State). Dept. of Natural Resources. *Washington's Major Public Lands*. 1:1,000,000. Gives State & Federal ownership. free: Dept. of Natural Resources, Olympia, WA 98504.

ALBERTA

Calgary, City of.... *City of Calgary, Alberta, 17 October 1924*.
Mr. J. Cuvelier, 64 White Oak Cres., S.W., Calgary, Alberta. Cost is \$3.00 prepaid, which includes shipping.

An airphoto mosaic of the City of Calgary, scale 1:12,000, size 125 x 95cm has been constructed from 138 separate air photos. This is the earliest possible photo mosaic. Major roads, railroads, and rivers have been labelled. 98 cultural features have been indexed. This mosaic is the only map to show Calgary as it really was, because other maps show Calgary as it was planned, which included planned subdivision.

CALIFORNIA

-- Bailey, Edgar H. and Deborah R. Harden. *Map showing mineral resources of the San Francisco Bay region, California -- present availability and planning for the future*. 1:250,000 Reston, VA.: U.S. Geological Survey, 1975. Miscellaneous Investigations Series Map I-909. \$1.00 Colored map, with descriptive text. Prepared as part of the San Francisco Bay Region Environment and Resources Planning Study.

-- Chase, Thomas E., W. R. Normark, and P. Wilde. *Oceanographic data of the Monterey Deep Sea Fan*. 1st Edition, June 1975. Prepared at Geologic Data Center, Scripps Institution of Oceanography, La Jolla, California. Institute of Marine Resources, Technical Report Series TR-58. \$3.00

Mercator Projection. Scale at 35° Latitude: 1:898,524. Contour interval = 100 meters. Covers area 120° x 127°, 34° x 37° Insets: Geologic features; seismic reflection & refraction; coastal reflection surveys; sediment stations. On verso: magnetic lineations; gravity interpretations; earthquake epicenters; calcofi stations; monthly surface currents by degrees and sea surface temperatures. References and text on face and verso.

Copies may be obtained by writing to: Institute of Marine Resources, University of California, San Diego; La Jolla, CA 92037; or by contacting Barry Gardner-Smith, Map Librarian, Scripps Institution of Oceanography, same address.

OREGON

-- Oregon State Water Resources Board, 1158 Chemeketa St., N.E., Salem, OR., 97310.

Map # 7.6: *Umatilla Drainage Basin*. 1974. \$.50¢

Map #13.6: *Goose & Sumner Lakes Drainage Basin*. 1975. \$.50¢

-- Oregon Department of Transportation. Salem, OR 97310

Intercity Bus Transportation in Oregon. Preliminary Report. 1975. Cost?

OREGON STATE HIGHWAY DIVISION

PRICE LIST FOR MAPS

JULY 1974

1. GENERAL HIGHWAY - SERIES OF COUNTY MAPS*

DETAILS INCLUDE: Highways, Roads, Railroads, Man-made Features, Streams, Mountains, Forests, Sections, Townships, Communities and Incorporated Cities.

(Note: Larger counties require more than one sheet for county coverage. See latest index to General Highway Series County Maps to determine sheet numbers and latest revision date.)

Congested areas within each county are enlarged on supplemental sheets. Maps revised since 1964 have photo map enlargements.

PRICE
PER SHEET

A. Prints available at approx. 1" to 1 Mile (1:62500) (36" x 42")	\$ 1.00
B. Enlarged supplemental sheets - Counties prior to 1963 1"=650' (36" x 42")	1.00
C. Photo Map Enlargements - Counties 1963 or later 1"=600' (36" x 42")	1.00
D. Above Map also available at approx. 1/2 size (17 1/2" x 20") (Offset Prints)30
E. Complete Statewide Atlas of above - 1/2 size County Maps (17 1/2" x 20") (Offset Prints) With Covers	50.00
Lexide Covers for -1/2 size County Maps	1.50

2. COUNTY ROAD INDEX MAPS:*

DETAILS INCLUDE: Highway Names and Numbers, County and Public Road Names and Numbers. (These numbers have been assigned by the Oregon State Highway Division for control purposes.)

A. Prints available in scales of approx. 1/2" to 1 Mile, 1" to 1 Mile, 4" to the Mile and 1"=600', depending on the county and density of the area.	1.00
---	------

3. HIGHWAY MAP OF STATE

DETAILS INCLUDE: Highways, Roads, County and National Forest Boundaries, Major Mountains and Streams and Township Lines.

A. Prints available in One Color - Scale 1"=8 Miles 1:500,000 Size (42" x 54")	2.00
B. Prints available in One Color - Scale 1"=16 Miles Size (22" x 28")	1.00

4. CITY MAPS*

DETAILS INCLUDE: Streets, Parks, Schools, Public Buildings, Streams, and Mountains. (Some cities contain more than one sheet.)

A. One Color Prints available at Scale of 1"=800' Size 17" x 19"30
B. One Color Prints available at Scale of 1"=800' Size 17" x 19" Complete Atlas with Cover	60.00
C. One Color Prints available at Scale of 1"=1600' Size 8 1/2" x 11"10
D. One Color Prints available at Scale of 1"=1600' Size 8 1/2" x 11" Complete Atlas with Cover	37.00

5. STRAIGHT LINE MAP OF STATE HIGHWAYS*

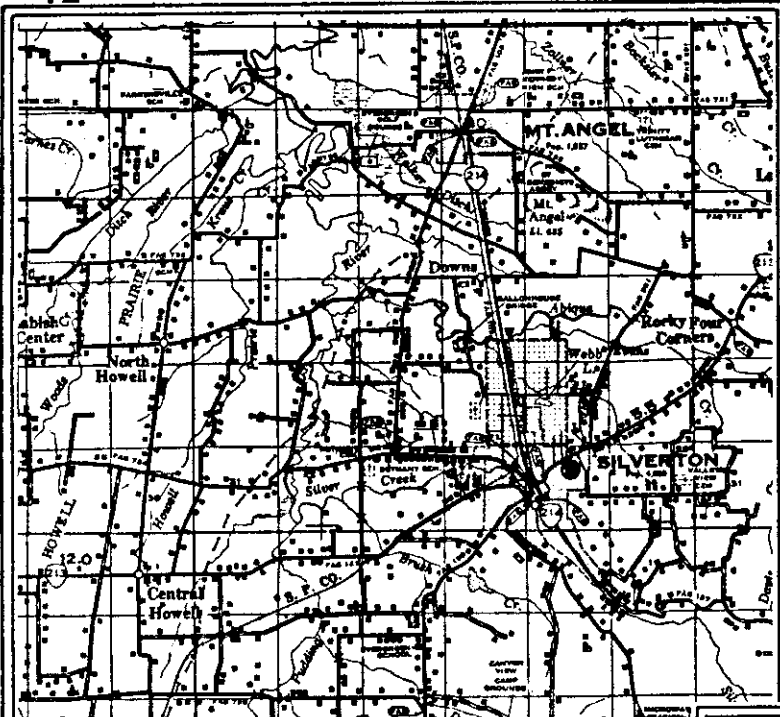
DETAILS INCLUDE: Surface Types, Milepoints of Jurisdictional Boundaries, Intersecting County Roads and Principal City Streets, Access Control, and Various Culture Features, in a graphical form.

A. One Color Prints - Size 11" x 17"15
B. One Color Prints - Complete Set - Primary Highways	10.00
C. One Color Prints - Complete Set - Secondary Highways	10.00
D. Lexide Covers for above sets50
E. Straight Line Book with Covers	20.50

*See Reverse Side For Examples Of Maps.

MAP DISTRIBUTION UNIT
ROOM 17, HIGHWAY BLDG.
SALEM, OREGON 97310

Make checks payable to the Oregon State Highway Div.



COUNTY MAP APPROX 1/2"=1Mile

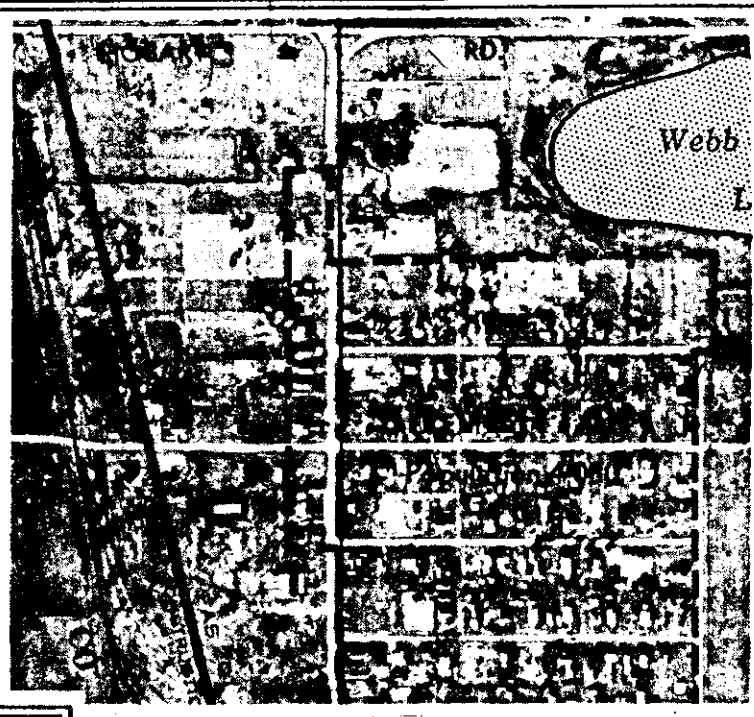
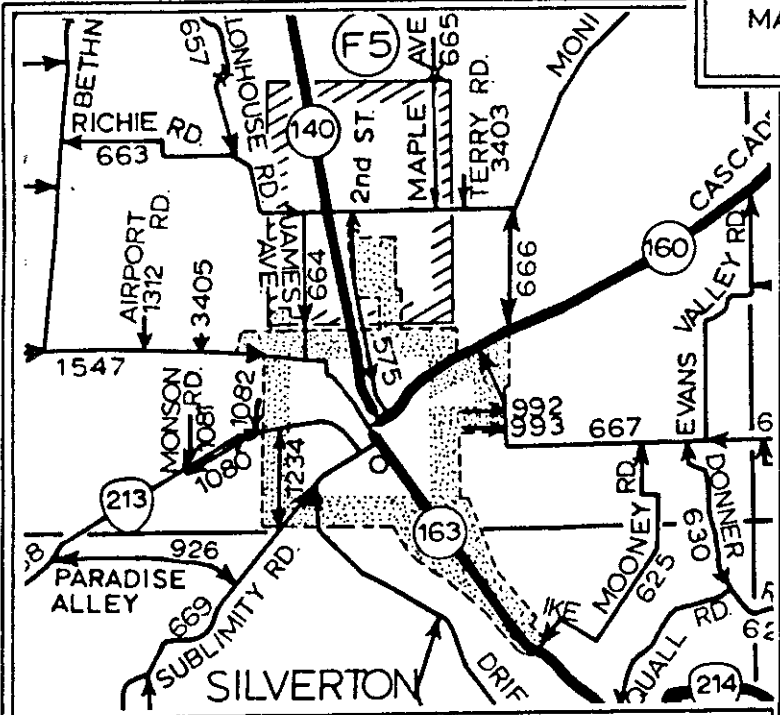


PHOTO MAP ENLARGEMENT 1"=600'

EXAMPLES
OF
MAPS



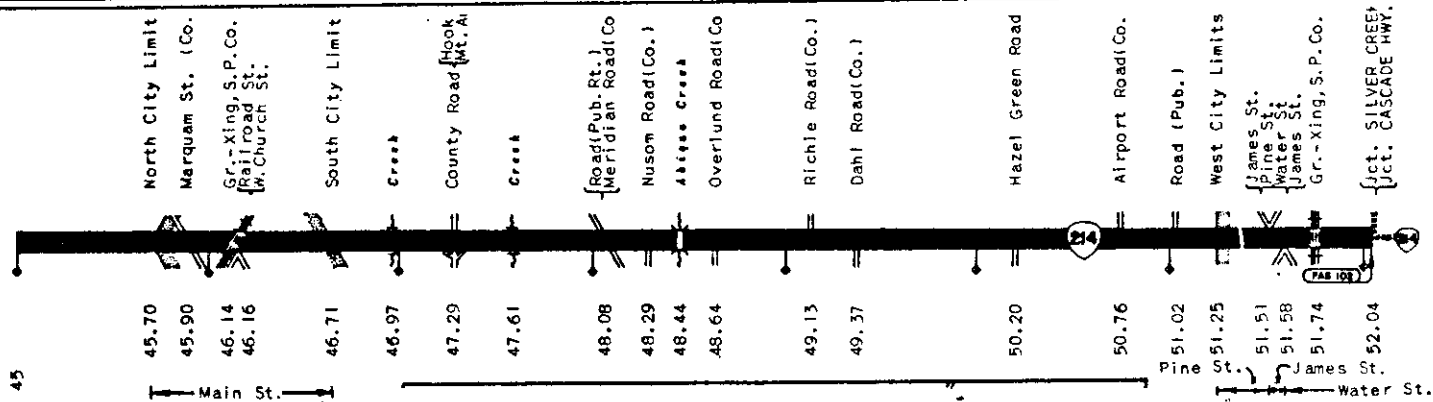
COUNTY INDEX MAP APPROX. 1"=1Mile



CITY MAP 1"=1600'

SILVERTON
MARION COUNTY, OREGON
PREPARED BY THE
OREGON STATE HIGHWAY DEPARTMENT
IN COOPERATION WITH THE
U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
Population 4,050
Scale in Feet

Revised July 1966



OREGON STATE HIGHWAY DIVISION

INDEX OF GENERAL HIGHWAY SERIES COUNTY MAPS

Available From Map Distribution Unit


January 1975

LEGEND

LATEST REVISION DATE — 1973

Revision Underway — RU

Map Sheet Numbers — 1, 2

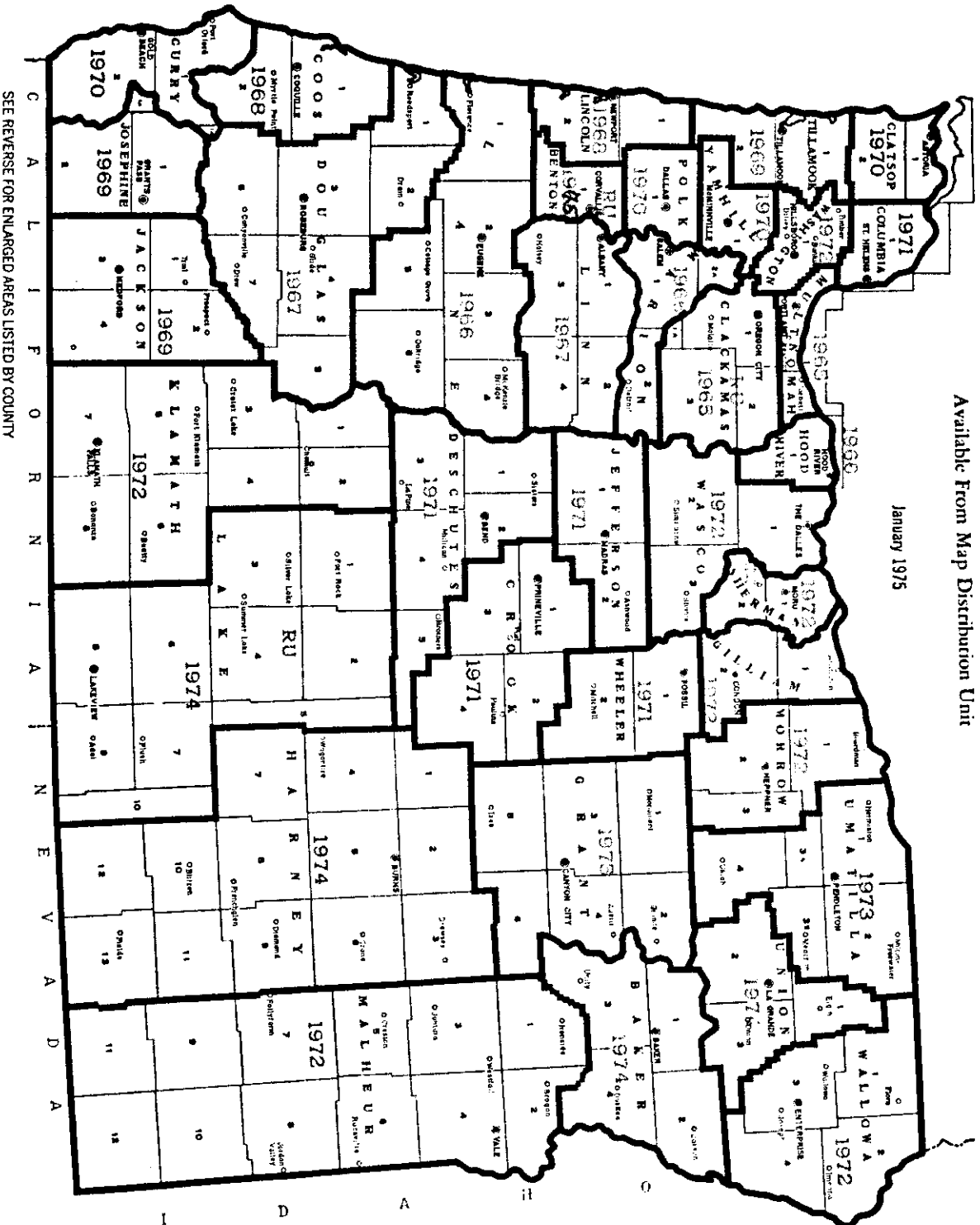
SHEET LAYOUT —  3

SIZES AND SCALES

1. 36" x 42" sheets Base: 1"=1 Mile
Most Enlargements: 1"=600'

2. 17 1/2" x 20" sheets Base
Approx.: 1/2"=1 Mile
Most Enlargements: 1"=1500'

Address all map orders to
Map Distribution Unit
Room 17, State Highway Bldg.
Salem, Oregon 97310



SEE REVERSE FOR ENLARGED AREAS LISTED BY COUNTY

GENERAL HIGHWAY MAPS - ENLARGEMENT INDEX - 1955-1974 SERIES
 Scale Ratio - 8:62,500 or 8:145,875 OLD SERIES
 Mosaic Scale 1" = 600' or 1" = 1500'

14

County & Sheet No.	Area	County & Sheet No.	Area	County & Sheet No.	Area	County & Sheet No.	Area
BAKER 4 Base Sheets, 1 Enlargement Sheet Listed Below		DOUGLAS 7 Base Sheets, 14 Enlargement Sheets Listed Below		LAKE 10 Base Sheets, 1 Enlargement Sheet Listed Below		POLK 1 Base Sheet, 4 Enlargement Sheets Listed Below	
2A-3A-4A Cornucopia, Unity, Halfway, Durkee, New Bridge, Lime, Robinette		A DRAIN, Curtin-Anlauf, Gardiner, Winchester Bay, ELKTON, REEDSPORT, YONCALLA		A Christam Valley, Silver Lake, PAISLEY, New Pine Creek, LAKEVIEW		A Grande Ronde, Ballston, Rickreall, Brunks Corner, FALLS CITY, Buena Vista & Valsetz	
BENTON 1 Base Sheet, 3 Enlargement Sheets Listed Below		B E. Sutherland-Fair Oaks, Glide, Idlewild Park		LANE 6 Base Sheets, 14 Enlargement Sheets Listed Below		B DALLAS	
A N. CORVALLIS & Vic.		C OAKLAND, Deady, SUTHERLIN		A Heceta Beach, N. Florence, Glenada, Mapleton, Swisshome, Triangle Lake, Noti, Elmira, Pleasant Hill, Saginaw, Dorana		C WILLAMINA, MONMOUTH-INDEPENDANCE	
B CORVALLIS & Vic.		D CLEVELAND-ELGAROSE		B JUNCTION CITY & Vic.		Valley Junction	
C Summit, Wren, Kings Valley, N. ALBANY, Adair Village, Alpina, Aista, Country Estates, PHILOMATH & Vic.		E M E L R O S E, E. ROSEBURG-DIXONVILLE		C ALVADORE & Vic.		D WEST SALEM	
CLACKAMAS 3 Base Sheets, 8 Enlargement Sheets Listed Below		F WINCHESTER-WILBUR		D SANTA CLARA & Vic.		SHERMAN 2 Base Sheets, 1 Enlargement Sheet Listed Below	
A LAKE OSWEGO & Vic.		G NORTH ROSEBURG		E W. EUGENE		A Biggs, RUFUS, WASCO, MORO, GRASS VALLEY & Kent	
B STAFFORD & Vic.		H ROSEBURG		F WILLAKENZIE & Vic.		TILLAMOOK 2 Base Sheets, 6 Enlargement Sheets Listed Below	
C MILWAUKIE & Vic.		I EAST WINSTON-GREEN		G CENTRAL EUGENE & Vic.		A NEMAHEM BAY	
D OREGON CITY & Vic.		J ROUND PRAIRIE		H S. EUGENE		B Manhattan Beach-Brighton, ROCKAWAY, Fairview, GARIBALDI	
E AREA S. OF OREGON CITY		K WEST WINSTON, DILLARD		I SPRINGFIELD		C BAY CITY, Barview, Cape Mearns, OceanSide	
F HAPPY VALLEY & Vic.		L MYRTLE CREEK, TRI CITY		J E. SPRINGFIELD, JASPER & Vic.		D TILLAMOOK	
G Wilsonville, Carver, Mulino, Damascus, Colton, Boring, Alder Cr., Redland, Brightwood, Estacada, Welches Zigzag & Vic., Rhododendron & Vic.		M CANYONVILLE, RIDDLE, GLENDALE		K GOSHEN & Vic., CRESWELL & Vic.		E SOUTH PRAIRIE	
CLATSOP 2 Base Sheets, 6 Enlargement Sheets Listed Below		N Nonpareil, Lookingglass, Porter Creek, Tenmile, Camas Valley, Day Creek, Fortune Branch, Tiller		L COTTAGE GROVE & Vic.		F Netarts, Pleasant Valley, Beaver, Tierra Del Mar, Neskowin, Hebo, Winama Beach, Cloverdale, Pacific City	
A WARRENTON		GILLIAM 2 Base Sheets, 1 Enlargement Sheet Listed Below		M OAKRIDGE & Vic.		UMATILLA 4 Base Sheets, 7 Enlargement Sheets Listed Below	
B ASTORIA		A ARLINGTON, Heppner Jct., CONDON & LONEROCK		N Marcola, Cedar Flat, Waterville, Deerhorn, Leaburg, Leaburg Dam, Vida, Blue River, Dexter, McKenzie Bridge, Trent		A UMATILLA	
C Tongue Pt., Wauna-Westport, Vinamaple, Eisle, Jewell Jct.		GRANT 6 Base Sheets, 3 Enlargement Sheets Listed Below		LINCOLN 2 Base Sheets, 6 Enlargement Sheets Listed Below		B HERMISTON	
D SVENSEN		A MONUMENT, Ritter, GRANITE, LONG CREEK		A NORTH LINCOLN CITY, Otis, Rose Lodge, Eddyville, Elk City		C COLD SPRINGS RESERVOIR	
E Knappa Jct., Brownsmead		B AUSTIN-BATES, DAYVILLE		B SOUTH LINCOLN CITY, KERNVILLE-GLENEDEN BEACH		D PENDLETON	
F HAMMOND, Cannon Beach Jct., Area S. of Astoria		C CANYON CITY-JOHN DAY		C DEPOE BAY-LINCOLN BEACH, Otter Rock, Beverly Beach		E MILTON-FREEWATER	
G Camp Rilea, GEARHART, SEASIDE		HARNEY 13 Base Sheets, 1 Enlargement Sheet Listed Below		D SILETZ, AGATE BEACH, NEWPORT		F STANFIELD-ECHO, RIETH	
H Fort Stevens, Jewell, Twilight Creek, Arch Cape, CANNON BEACH		A BURNS, HINES, Frenchglen, Fields, Drewsey, Crane		E TOLEDO, Newport Airport, Seal Rock, Eckman Lake, Drift Creek, Tidewater		G Umapina, Helix, Athena, Weston, Tollgate, Adams, Ukiah, Meacham, Pilot Rock, Mission	
COLUMBIA 1 Base Sheet, 6 Enlargement Sheets Listed Below		HOOD RIVER 1 Base Sheet, 4 Enlargement Sheets Listed Below		F WALDPOR, Wakonda Beach-San Marine, YACHATS		UNION 3 Base Sheets, 3 Enlargement Sheets Listed Below	
A CLATSKANIE & RAINIER		A HOOD RIVER & Vic.		LINN 4 Base Sheets, 5 Enlargement Sheets Listed Below		A ELGIN, SUMMERVILLE, IMBLER, Perry, NORTH POWDER	
B Tresharne, VERNONIA & Alston		B ODELL & Vic.		A ALBANY & Vic.		B LAGRANDE	
C ST. HELENS		C DEE & Vic., MIDDLE VALLEY & Vic.		B N. LEBANON & Vic., LEBANON & Vic.		C COVE, UNION	
D WARREN		D PARKDALE & Vic.		C WATERLOO & Vic., NARROWS & Vic.		WALLOWA 4 Base Sheets, 1 Enlargement Sheet Listed Below	
E SCAPPOOSE & COLUMBIA CITY		JACKSON 4 Base Sheets, 11 Enlargement Sheets Listed Below		D SWEET HOME & Vic.		A Troy, Flora, Enterprise, Wallowa, Lostine Wallowa State Park, Joseph	
F Woodson, Marshland, Locoda, Mager, Lindberg, Prescott, Goble, Deer Island, Mist, Pittsburg & Spitzenberg		A Prospect, Butte Falls, Trait, Shady Cove, Wimer, Sams Valley		E LYONS, SCIO, Crabtree, Riverside, Tangent, Peoria, Shedd, Crawfordville, Holley		WASCO 3 Base Sheets, 2 Enlargement Sheets Listed Below	
COOS 2 Base Sheets, 9 Enlargement Sheets Listed Below		B ROGUE RIVER, ROCK POINT		MALHEUR 12 Base Sheets, 3 Enlargement Sheets Listed Below		A MOSIER, Rowena, Chenoweth, DUFUR, Tygh Valley, MAUPIN, SHANIKO, ANTELOPE, THE DALLES DAM	
A Lakeside & Vic., Hauser & Vic., Shorewood		C GOLD HILL, TOLO		A Brogan, Jamieson, Juntura, Harper, Payette Jct., Lake Owyhee State Park, McDermitt, Cairo Jct.		B THE DALLES	
B NORTH BEND		D LAGLE POINT, White City, Area S. of White City		B VALE, NYSSA, Jordan Valley, Adrian		WASHINGTON 1 Base Sheet, 11 Enlargement Sheets Listed Below	
C Eastside-Cooston, Hayden, Coaledo		E CENTRAL POINT		C ONTARIO AND VICINITY		A Buxton, Manning, Banks, Gates Creek, Verboort, Roy Cherry Grove, Laurelwood, Chenoweth, Area W. of Forest Grove	
D W. COOS BAY-CHARLESTON		F MEDFORD AIRPORT		MARION 2 Base Sheets, 6 Enlargement Sheets Listed Below		B FOREST GROVE	
E COOS BAY-EASTSIDE		G JACKSONVILLE		A KEIZER & Vic.		C CORNELIUS	
F COQUILLE		H MEDFORD		B SALEM & Vic.		D HILLSBORO	
G BANDON		I PHOENIX, TALENT		C S. SALEM & Vic.		E FARMINGTON	
H MYRTLE POINT		J Dark Hollow, Area S. of Talent, Area N. of Ashland		D E. SALEM & Vic.		F ORENCO	
I Laurel Grove & Vic., Sumner, Greenacres, Fairview, Riverton, Johnson, Arago, Broadbent, Bridge, POWERS		K ASHLAND		E S.E. SALEM & Vic.		G ALOHA	
CROOK 4 Base Sheets, 2 Enlargement Sheets Listed Below		JEFFERSON 2 Base Sheets, 1 Enlargement Sheet Listed Below		F Butteville, E. Woodburn, Monitor, Brooks, N. Silverton, Shaw, Marion, W. Stayton, Mehama		H West Union, CEDAR HILLS	
A Prineville West & Prineville Reservoir		A Warm Springs, Warm Springs East, Madras South & MADRAS		MORROW 3 Base Sheets, 1 Enlargement Sheet Listed Below		I BEAVERTON	
B PRINEVILLE		JOSEPHINE 2 Base Sheets, 5 Enlargement Sheets Listed Below		A BOARDMAN, IRRIGON, IONE, LEXINGTON, HEPPNER, HARDMAN		J TIGARD	
CURRY 2 Base Sheets, 3 Enlargement Sheets Listed Below		A Wolf Creek, Sunny Valley, Pleasant Valley, Merlin, Poque River Orchards, Wilderville		MULTNOMAH 1 Base Sheet, 12 Enlargement Sheets Listed Below		K TUALATIN	
A Langlois, PORT ORFORD, Floras Lake, Ophir, Hunter Creek		B GRANTS PASS		A N. PORTLAND HARBOR & Vic.		North Plains, Gaston, Scholls, Sherwood Area West of Tigard	
B Nesika Beach, GOLD BEACH, Winchuck		C JEROME PRAIRIE		B SWAN ISLAND & Vic.		WHEELER 2 Base Sheets, 1 Enlargement Sheet Listed Below	
C BROOKINGS		D Area N.W. of Grants Pass, Savage Rapids, Area S. of Grants Pass		C CENTRAL BUS. DIST. & Vic.		A FOSSIL, Kinzua, SPRAY & MITCHELL	
DESCHUTES 5 Base Sheets, 10 Enlargement Sheets Listed Below		E Murphy, Selma, Kerby, O'Brien, Cave Jct.		D S.W. PORTLAND & Vic.		YAMHILL 1 Base Sheet, 5 Enlargement Sheets Listed Below	
A Terrebonne, Prineville Junction, Long Butte & Black Butte Ranch		KLAMATH 8 Base Sheets, 7 Enlargement Sheets Listed Below		E PORTLAND INT. AIRPORT & Vic.		A YAHMILL, CARLTON, DUNDEE, Hopewell	
B REDMOND		A Crescent Lake, Fort Klamath, Agency International, Klamath Agency Jct., Modoc Point, Old O.T.J., Sprague River, Beatty, Bly, Worden, Falcon Hts., Stonebridge		F SULLIVAN GULCH & Vic.		B NEWBERG	
C TUMALO		B CHILOQUIN, Keno, N.E. ALTAMONT, MERRILL		G S.E. PORTLAND & Vic.		C McMinnville	
D Area North of Bend, Area South of Bend & LaPine Recreation Area		C MALIN, BONANZA, Crescent-Gilchrist, Crescent Lake Jct., Chemult		H PARKROSE & Vic.		D LAFAYETTE & DAYTON	
E BEND		D Wocus, & Stewart-Lennox		I POWELL BUTTE & Vic.		E WILLAMINA, SHERIDAN & AMITY	
F AREA WEST OF BEND, SISTERS, Lava Island Falls, Camp Polk & Fall River		E KLAMATH FALLS		J TROUTDALE & Vic.		All major areas listed in CAPS	
G SUNRIVER		F KINGSLEY FIELD		K GRESHAM & Vic.			
H General Patch Bridge & Bates Butte		G Henley, Lakethore, Agency Lake, Harrman Lodge, Midland		L Holbrook, Bridal Veil, Burlington, Springdale, Bonny Slope, Bonneville, Barnes Heights, Corbett, Pleasant Home, Latourell			
I Paulina Prairie							
J LaPine							

MAILING ADDRESS:

Oregon State Highway Division
 Photocopy & Map Distribution
 Room 17, Highway Bldg.
 Salem, Oregon 97310

SCALE

(8½ x 11) 1"=1600'
 (17 x 19) 1"=800'

PRICE

@ \$.10
 @ \$.30

The cost of the map of a particular city may be determined by multiplying the number of sheets indicated for the city by either \$.30 or \$.10, depending on the size desired.

MAKE CHECKS PAYABLE TO:

Oregon State Highway Division

INDEX OF CITY MAP REVISIONS

NAME	NO. OF SHEETS	REV. DATE	NAME	NO. OF SHEETS	REV. DATE	NAME	NO. OF SHEETS	REV. DATE
Adams	1	11-73	Dallas	2	8-70	Harrisburg	1	9-70
Adrian	1	10-72	Dayton	1	7-74	Helix	1	6-63
Albany	4	3-71	Dayville	1	4-74	Heppner	1	5-61
Amity	1	7-74	Depoe Bay	1	6-73	Hermiston	1	7-69
Antelope	1	1-74	Detroit	1	11-73	Hillsboro	6	5-70
Arlington	1	8-70	Donald	1	2-74	Hines	1	12-74
Ashland	5	12-65	Drain	1	8-68	Hood River	1	8-70
Astoria	4	2-66	Dufur	1	5-65	Hubbard	1	12-72
Athens	1	12-73	Dundee	1	5-72	Huntington	1	8-69
Aumsville	1	8-70	Dunes City	2	10-70			
Aurora	1	11-73	Durham	1	5-66	Idanha	2	7-74
						Imbler	1	2-66
Baker	4	8-70	Eagle Point	1	1-71	Independence	1	1-73
Bandon	1	10-73	Eastside	2	8-70	Ione	1	7-74
Banks	1	11-73	Echo	1	9-69	Irrigon	1	11-68
Barlow	1	12-73	Elgin	1	8-63	Island City	1	9-69
Bay City	1	1-74	Elkton	1	7-63			
Beaverton	4	7-74	Enterprise	1	12-73	Jacksonville	1	10-69
Bend	4	3-67	Estacada	1	9-73	Jefferson	1	11-72
Boardman	1	10-70	Eugene	11	1-66	John Day	1	9-70
Bonanza	1	10-73				Johnson City	1	1970
Brookings	2	12-72	Fairview	1	4-74	Jordan Valley	1	4-65
Brownsville	1	9-73	Falls City	1	12-73	Joseph	1	4-68
Burns	1	9-74	Florence	2	4-74	Junction City	1	3-74
Butte Falls	1	5-68	Forest Grove	3	11-72	Juntura	1	8-65
			Fossil	1	3-67			
Canby	2	3-73				King City	1	3-74
Cannon Beach	2	12-70	Garibaldi	1	8-70	Klamath Falls	4	4-65
Canyon City	1	9-73	Gaston	1	8-69			
Canyonville	1	12-73	Gates	1	1-74	Lafayette	1	12-74
Carlton	1	12-73	Gearhart	1	9-69	La Grande	2	9-69
Cascade Locks	1	9-73	Gervais	1	11-72	Lake Oswego	4	1-71
Cave Junction	1	3-73	Gladstone	2	3-73	Lakeside	1	9-74
Central Point	1	2-73	Glendale	1	8-65	Lakeview	1	4-65
Chiloquin	1	9-69	Gold Beach	1	10-68	Lebanon	1	2-73
Clatskanie	1	8-70	Gold Hill	1	3-74	Lexington	1	7-74
Coburg	1	8-69	Granite	1	7-74	Lincoln City	3	5-70
Columbia City	1	11-72	Grants Pass	4	1-67	Lone Rock	1	6-63
Condon	1	4-74	Grass Valley	1	2-63	Long Creek	1	4-61
Coos Bay	4	4-65	Greenhorn	1	12-73	Lostine	1	6-63
Coquille	1	11-74	Gresham	4	1-73	Lowell	1	9-69
Cornelius	1	7-74				Lyons	1	9-73
Corvallis	6	5-68	Haines	1	4-65			
Cottage Grove	1	8-72	Halfway	1	4-65	Madras	1	10-73
Cove	1	7-74	Halsey	1	5-74	Malin	1	4-65
Creswell	1	11-72	Hammond	1	5-70	Manzanita	1	1972
Culver	1	11-72	Happy Valley	1	10-68	Maupin	1	3-73

OVER

16 NAME	NO. OF SHEETS	REV. DATE	NAME	NO. OF SHEETS	REV. DATE	NAME	NO. OF SHEETS	REV. DATE
Maywood Park	1	2-69	Powers	1	5-62	Sutherlin	2	6-70
McMinnville	6	11-72	Prairie City	1	11-60	Sweet Home	1	1-74
Melford	7	8-67	Prescott	1	2-61			
Merrill	1	9-73	Prineville	1	9-73	Tangent	1	6-73
Metolius	1	10-73				Talent	1	9-70
Mill City	1	10-73	Rainier	2	2-73	The Dalles	3	9-69
Millersburg	2	11-74	Redmond	2	2-74	Tigard	3	12-74-
Milton-Freewater	1	4-68	Reedsport	2	4-68	Tillamook	1	7-61
Milwaukie	4	9-69	Richland	1	4-65	Toledo	1	2-74
Mitchell	1	2-74	Riddle	1	12-62	Troutdale	2	2-73
Molalla	1	9-69	Rivergrove & Vic	1	4-71	Tualatin	2	12-72
Monmouth	1	9-73	Rockaway	1	6-61	Turner	1	2-74
Monroe	1	12-73	Rogue River	1	12-74			
Mount ment	1	4-61	Roseburg	5	10-69	Ukiah	1	9-72
Moro	1	4-63	Rufus	1	9-74	Umatilla	2	2-74
Moser	1	7-63				Union	1	4-65
Mt. Angel	1	12-73	Salem	13	4-73	Unity	1	10-72
Mt. Vernon	1	6-70	Sandy	1	2-74			
Myrtle Creek	1	12-74	Scappoose	1	1-73	Vale	1	1-73
Myrtle Point	1	7-62	Scio	1	10-70	Veneta	1	11-73
			Scotts Mills	1	12-60	Vernonia	1	6-70
			Seaside	2	1-73			
Nehalem	1	2-74	Seneca	1	8-70	Waldport	1	11-73
Newberg	2	1-73	Shady Cove	1	1-73	Wallowa	1	6-63
Newport	1	5-68	Shaniko	1	2-63			
North Bend	2	10-64	Sheridan	1	10-73	Warrenton	5	12-62
North Plains	1	12-73	Sherwood	1	11-72	Wasco	1	3-73
North Powder	1	7-74	Siletz	1	7-61	Waterloo	1	5-74
Nyssa	1	8-65	Silverton	1	3-74	West Linn	6	9-69
			Sisters	1	3-74	Weston	1	4-65
Oakland	1	7-74	Sodaville	1	6-61	Wheeler	1	2-74
Oakridge	2	10-68	Spray	1	3-61	Wilsonville	3	7-74
Ontario	3	9-69	Springfield	7	5-73	Willamina	1	3-73
Oregon City	3	1-73	Stanfield	1	3-67	Winston	1	3-74
			Stayton	1	9-69	Woodburn	2	1-69
Paisley	1	2-66	St. Helens	1	2-73	Wood Village	1	4-74
Perdleton	4	9-64	St. Paul	1	4-74			
Philomath	1	1-73	Sublimity	1	9-74	Yachats	1	6-66
Phoenix	1	4-69	Summerville	1	11-63	Yamhill	1	3-74
Pilot Rock	1	9-69	Sumpter	1	4-65	Yoncalla	1	3-74
Port Orford	1	5-62						

OREGON (Continued) [New Mapping of Western North America]

-- Lane Council of Governments. Eugene, Oregon.

Lane County Preliminary General Plan: 1) Water Quality Management Plan. 1974. \$1.50; 2) Water Quality Report. 1974. \$1.50
Lane County Atlas. 1975. \$2.00

-- Blitz Weinhard Company, 1133 W. Burnside, Portland, OR 97205.

Pleasure Hunt Map of Oregon. 1975. free

NEW MAPPING OF WESTERN NORTH AMERICA (Continued)

ARIZONA

Aldridge, B. N.

Delineation of flood hazards in the Marana quadrangle, Pima County, Arizona, by B. N. Aldridge and D. E. Burkham. Reston, Va., U. S. Geological Survey, 1974. Scale 1:36,000. (U. S. Geological Survey. [Miscellaneous geologic investigations] Map I-846-B)

Arizona. Crop and Livestock Reporting Service.

Cropland atlas of Arizona, by Horace M. Mayers. Phoenix, Arizona, Arizona Crop and Livestock Reporting Service, 1974. Scale 1:300,000.

Arizona Oil and Gas Conservation Commission.

State of Arizona well location map A-1: Holbrook area, portions of Apache, Coconino, Gila and Navajo Counties. Phoenix, Arizona, 1975. 1:250,000

Arizona. Dept. of Transportation. Photogrammetry and Mapping Division.

Arizona road and street network map[s] Produced for Project ALISS ... in cooperation with the U. S. Dept. of Transportation, National Highway Traffic Safety Administration, Federal Highway Administration. [Phoenix, Arizona] 1972- Scale 1:12,500

Arizona Water Commission.

Maps showing ground-water conditions in the Waterman Wash area, Maricopa and Pinal Counties, Arizona, 1975. By E. E. Denis. Prepared by the U.S. Geological Survey. Phoenix, Arizona, 1975. (Arizona Water Commission. Hydrologic map series. Map H-1)

Davis, George Herbert.

Structure map of folds in Phanerozoic rocks, Colorado Plateau tectonic province of Arizona, by G. H. Davis and C. W. Kiven. Published by the Office of Arid Lands Studies and the Dept. of Geosciences, University of Arizona, Tucson, Arizona in cooperation with the Arizona Oil and Gas Conservation Commission, Phoenix, Arizona, 1975. Scale 1:500,000.

Drewes, Harald.

Geologic map and sections of the Happy Valley quadrangle, Cochise County, Arizona. Reston, Va., U. S. Geological Survey, 1974. Scale 1:48,000. (U. S. Geological Survey. Miscellaneous [geologic] investigations. Map I-832).

Gila County, Ariz. Planning and Zoning Commission.

Gila County, Arizona election precincts. Globe, Ariz., 1972. 1:500,000

Jay, J. E.

General soil map, Arizona. Compiled by J. E. Jay, Y. H. Havens, D. M. Hendricks [and others] Mosaic prepared by USDA-Soil Conservation Service from NASA Goddard Space Flight Center from Earth Resource Technology Satellite-1. Published by U. S. Soil Conservation Service and University of Arizona Agricultural Experiment Station as part of the National Cooperative Soil Survey. [Phoenix, Arizona] 1975. Scale 1:1,000,000.

Nelson, Richard C

50 hikes in Arizona. Text and photographs by Dick and Sharon Nelson. [Tombstone, Ariz., High School Biology & Science Supply Co., 1973]

Pictorial color map of Grand Canyon; geology, history, points of interest, river and rapids. [Salt Lake City, Utah, Printed by Paragon Press, 1972]. Scale ca. 1:84,000.

[continued on p. 44]

Railroad Maps of the United States: A Review

by

Thomas Nelson

Assistant Professor of Landscape Architecture
Washington State University, Pullman, Washington

United States. Library of Congress. Geography and Map
Division.

Railroad maps of the United States.

Includes index.

1. Railroads--United States--Maps--Bibliography--
Catalogs. 2. United States. Library of Congress.
Geography and Map Division. I. Modelski, Andrew M.
II. Title.

Z6026.R3U54 1975 016.912'1'3850973 75-619007

ISBN 0-8444-0155-2

For sale by the Superintendent of Documents, U.S. Government Printing Office,
Washington, D.C. 20402. Price: \$2.05 Stock Number 3004-00014

[Subtitle of work: "A selected annotated bibliography of original 19th Century
maps in the Geography and Map Division of the Library of Congress".]

It is a real treat, besides being a substantial contribution to cartographic research, to have this new publication. I am pleased that Mr. Modelski has had the fortitude to continue his work as published in June of 1971 (American Railroads 1830-1900: A Preliminary List of Maps selected from the collections of the Library of Congress Geography and Map Division), and the diligence to selectively edit, from several thousands of maps, a representative sampling of railroad maps. The support of the Geography and Map Division for such a publication is indeed welcome. I hope this type of cataloging will continue. I have conducted research in their Alexandria (Virginia) facility and continue to be impressed with the quantity of material, the orderly storage, the convenient accessibility, and the helpful assistance for researchers.

There are several observations I have on this publication, but first I must emphasize (and this is my disclaimer) that I am an architect--not a cartographer, historian, librarian, or member of a profession which would allow me to present a detailed critique on the author's technical procedures or other aspects of specific professional interest to librarians. My use of railroad maps is to study the development and settlement of the western states and to observe urban patterns, town planning, settlement of regions, and other events related to development of the western states.

To attempt to catalog into a single convenient reference book all the railroad maps in the Geography and Map Division would be a massive and unnecessary project. I feel Mr. Modelski has done a very good job in culling out 620 of the most relevant maps from the 5,000 available. We must also consider, however, that the maps from which the selections have been made represent only a fraction of the "railroad" maps that are available in other federal offices. In conducting research that requires information on railroads, remember that those in other offices may also be of great value. Source catalogs for other

material are:

1. Special List #13, List of Cartographic Records of the Bureau of Indian Affairs, Compiled by Laura E. Kelsay, The National Archives and Records Service, 1954.

Maps cataloged by States and Reservations. Many include railroad rights of way across Indian lands and therefore may be valuable.

2. Special List #19, List of Cartographic Records of the General Land Office, Compiled by Laura E. Kelsay, The National Archives and Records Service, 1964.

Maps cataloged by states under the following groups: manuscript and annotated maps; boundary survey maps and diagrams; field notes and related records; special maps of the United States and smaller areas, standard maps of the United States, states and territories; and maps of boundary surveys and investigations.

3. Special List #29, List of Selected Maps of States and Territories, Compiled by Janet L. Hargett, The National Archives and Records Service, 1971.

Cataloged by states. Excellent source for railroad information.

4. Land Ownership Maps, A Checklist of 19th Century United States County Maps in the Library of Congress, Geography and Map Division, Compiled by Richard Stephenson, 1967.

Cataloged by states and counties. Good source for detailed information on railroad lines.

Mr. Modelski's compilation is divided into the following sections: 1) Introductory Text, 2) United States, 3) Regions, 4) States, 5) Railroad Companies, and 6) Index.

1. In the "Introductory" section, the author gives a brief historical review of map-making technology and the development of railroad maps.

He mentions printing capabilities and techniques, such as zincography and cerography, which contributed significantly to the production and distribution of railroad maps, as did developments in the technology of paper-making. As printing techniques improved, prominent map publishers and printing companies began to emerge. The author also briefly describes various events which were significant in the history of railroading and therefore important developments in the publication of railroad maps; for example, the first railroads in the U.S., promotion of the transcontinental line, land grants, and railroad company promotional campaigns.

2. The "United States" maps selected give an excellent chronological review of railroad lines at a national scale from 1830 to 1898. Some maps have illustrations in the margins or detailed maps as inserts which have been cataloged by the author. These maps will often have a great deal of information but are generally best for studying routes on a national scale, changes in settlement patterns, or other aspects of railroad development that do not require attention to smaller scale detail.
3. The "Regional" section gives adequate coverage for all areas of the United States, but my comments concern those maps cataloged for the Western Region. The western regional coverage is a good general source for maps produced

during the 1850-1870 period for the trans-Mississippi west. The selected maps are cataloged chronologically. The shortcoming here, I feel, is the omission of maps after 1870. Major settlement in the western states (including the development of smaller, nontranscontinental railroad lines) occurred after 1870. The section includes the Army Topographic surveys (circa 1853-55) and concentrates on pre-1870 maps. Although late 19th C. maps are included in the "States" or "Railroad" sections, I feel some maps published at five-year intervals beginning at 1875 through 1900 would be a valuable addition.

4. The section on maps cataloged by "States" is also a very good general source, but this section too could be expanded. Concentrating specifically on the trans-Mississippi west, there is a significant omission of maps for certain states. Several states have only one map included: Oregon, 1879 (the transcontinental railroad line was not complete until 1881 through southern Idaho, via the Oregon Short Line); Montana, 1881; Idaho, 1896; Texas, 1900 (several railroads were located through Texas prior to 1900); Washington, 1896; Wyoming, 1895 (25 years after the Union Pacific was built through southern Wyoming); Colorado, 1879; New Mexico, 1879; South Dakota, 1892. The maps included in the "Railroad" section do compensate for these omissions, but for a complete chronological coverage, it is unfortunate that more maps were not available for inclusion.
5. Often, the most valuable railroad maps are those produced for (and by) the railroad companies. The maps often include promotional material, route schedules, graphically distorted route alignments, and insert maps, diagrams, and sketches, as well as other detailed information on towns, topography, connecting lines, geographical features, etc.--all valuable for railroad research.

Railroad companies--

All the maps selected for this section are, I am sure, excellent. There are 127 railroad companies included with 305 entries. The maps are chronologically and alphabetically arranged by railroad company. Railroads throughout the entire United States have been selected, including smaller local and regional lines--not only the major or transcontinental systems. Again, to concentrate on the American west, there are several railroads important to western development that have not been included. If these had been included in this section, the book would have been a more comprehensive source. The following railroad lines have not been included: St. Paul and Pacific Railroad and St. Paul, Minnesota and Manitoba Railway Co. (both forerunners of the Northern Pacific); The Lake Superior and Mississippi Railway; The San Francisco and San Jose Railroad (first in the west); the Oregon and California Railroad; Western Pacific; Oregon Short Line; Denver Pacific; Kansas Pacific; Great Northern; The Missouri, Kansas, Texas, and the Galveston-Harrisburg, Texas Railway (an important and early Texas line). There are several other more minor railroads in the southern Texas, eastern Kansas, and southern California areas which would be worthy of inclusion.

Admittedly, not all of the historic railroad documents I have mentioned as omissions are housed in the Geography and Map Division and so could not be included; yet it is important, I feel, to point out these omissions so that researchers are aware that other collections must be consulted.

[Editor's Note: Professor Nelson is the Director of the Western Urbanization and Railroad Development Research Project. The project is funded by the National Endowment for the Arts.]

Preliminary Programme

Joint MeetingS.L.A. Geography and Map Division &
Western Association of Map Libraries

Denver

Sunday, June 6, 1976

8:00 - 10:00 p.m. Reception for Members

10:30 p.m. Officers Meetings

Monday, June 7

10:00 - 12:00 am Business Meetings

12:00 - 1:30 pm Luncheon and speaker/topic: Avalanche control

2:00 - 4:30 pm Perspectives of Colorado: a series of four speakers on "Techniques in searching for Colorado's past" - the geologic/geographic setting; the mining and/or settlement history; resources of the State Historical Society; remote sensing.

Tuesday, June 8

10:00 - 12:00 am Contributed Papers I

12:00 - 2:00 pm Luncheon - "on your own"!

2:00 - 4:30 pm Contributed Papers II

Wednesday, June 9

12:00 - 2:00 pm Luncheon and speaker/ Hal Shelton: The Jeppeson Map

2:30 - 4:30 pm Progressive developments in Map Cataloguing and Classification: Panel on MARC-Map & the new "G" schedule, new rules for cataloguing; the Canadian MARC for maps. Participants:

Chairperson: David K. Carrington

Classification: Janet Hill

Cataloguing: John R. Schroeder

MARC-Map: Elizabeth U. Mangan

Canadian MARC: Hugo Stibbe

ISBD Maps: David K. Carrington/Hugo Stibbe

"evening in Denver"

6:00 - 9:00 pm

Tour and shopping excursion to Denver's Larimer Square. Dutch-treat dinner at the Old Spaghetti Factory, an inexpensive restaurant located in Denver's old trolley-car station.

Thursday, June 10

Field Trip

9:00 am to 5:00 pm

Tour would include the Denver Federal Center, visits to USGS Library, Bureau of Reclamation Library and Topographic Map Centre. Lunch at

the Fort, a well known restaurant that specializes in western cuisine (e.g., buffalo steaks). From the Fort in Morrison, the trip would move to Redrocks, a scenic natural amphitheatre and a drive over Loveland Pass, the highest all-weather highway in the U.S. (el. 12,000 - 13,000 feet). The return trip will stop at Golden with a tour through the Coors Brewery and then back to Denver.

Friday, June 11

All day

Meetings of W.A.M.L. (S.L.A. Geography & Map Div. Members are encouraged to attend.)

A map collectors/users conference emphasizing who, what, when, how; i.e., how do map librarians discover what the Federal agencies publish, what new maps are projected, etc.: Bureau of Census, State Department, Central Intelligence Agency, Defense Mapping Agency, Bureau of Land Management, Bureau of Reclamation, et al. How does a library get free and automatic distribution?

Brian F. Phillips, Chairperson, SLA Geography and Map Division's 1976 Conference Committee, and Mary Larsgaard, WAML President, will be developing final plans for this joint meeting. More definite schedules will be published in the March 1976 *Information Bulletin* [Vol. 7, #2], and WAML Members will be sent separate announcements in due course. Plan to attend!

■ MAP SCALE INDICATOR

The Map Scale Indicator, long sought by many map librarians, is at last available. It may be used to ascertain the relative fraction scale of any map on which the parallels of latitude or a graphic scale of linear distance, in feet, miles, or kilometers is shown. It is one of the most important tools for map catalogers. It is produced on a 15½ x 3½ inches sheet of stable-base polyester film, .007" thickness. Available from Continental CARTOgraphics, P.O. Box 2704 Madison, Wisconsin 53701, the price is \$2.00 which includes shipping and handling. The Map Scale Indicator was created by Michael L. Czechanski and Clifford H. Wood (husband of Alberta Auringer Wood, Past-Chairperson of SLA's Geo. & Map Division.

■ METEORITE CRATERS

Apropos of Lee Hubbard's "Crater Hunting: a cartographic game for any number of players" [see *Information Bulletin*, Vol. 6, #3, June 1975, p. 40], a 2-page article by Dr. P. B. Robertson, an earth scientist in the Gravity and Geodynamics Division of the Earth Physics Branch of the Canadian Department of Energy, Mines and Resources, appears in the Summer 1975 issue of *GEOS*, published by DEMR [distributed without charge on request]: "Historical Plaque Marks the Holleford Meteorite Crater; twenty-three large meteorite impact craters have been recognized in Canada. A new search of topographic maps and ERTS photography indicates the presence of a possible 100 additional impact sites."

Catalogues

RICHARD FITCH, OLD MAPS AND PRINTS. 2324 Calle Halcon, Santa Fe, New Mexico 87501 [phone (505) 982-2939. *Catalogues free.*

Catalogue No. 24: Americana. 1975. 217 items, described in detail, area is main entry, some illustrated, offset litho, easy to read. Prices range from a high of \$295. to low of \$10. with average price \$27.70, mode price is \$15., and 3/4ths of total items in this catalogue are in the \$27.50 to \$12.50 range.

FRANCE. BUREAU DE RECHERCHES GÉOLOGIQUES ET MINIÈRES. Service Géologique National. Service des Ventes, Boite postale 6009, 45018 Orléans Cedex, France. *Catalogues free.*

Catalogue des Publications, 1975. The B.R.G.M. is a public organization of an industrial and commercial character which is responsible for scientific studies concerning the Earth Sciences and the productive exploitation of mineral resources. It operates both in France and abroad within technical cooperation schemes or under contract to governments, private companies or individuals. In France, its role as the national Geological Service includes a documentation service which involves publication and sale of scientific works resulting from research and studies undertaken by the B.R.G.M. Since the amalgamation in January 1968 with the Geological Mapping Service of France, the latter accounts for one of the most important elements of the B.R.G.M. Publications Catalogue. Within the B.R.G.M., the Sales Service is responsible for the distribution of maps and publications, and the Documentation Department for documentary studies and works.

The Catalogue text is in French, prices quoted in Francs. Geographic coverage includes France proper, North Africa, West Africa, Central Africa, Madagascar, West Indies, South Pacific. All aspects of land and marine geology, and a vegetation series of France @ 1:200,000, an ERTS satellite photo of France @ 1:1M, etc.

GEOLOGICAL SOCIETY OF AMERICA. 3300 Penrose Place, Boulder, Colorado 80301. *Catalogues free.*

Mini-Catalog, Fall 1975. Includes in-print Memoirs, Microform Publications, Special Papers, Treatise on Invertebrate Paleontology, Engineering Geology, Maps and Charts, Correlation Charts, Bulletin reprints, Miscellany. Cites how to order and quantity discounts. Recent maps listed are: MC-7: "Bathymetric Map of the Bering Shelf"; MC-9: "Gravity Field of the Northwest Pacific Ocean Basin and its Margin: Hawaii and Vicinity"; MC-10: "Gravity Field of the Northwest Pacific Ocean Basin and its Margin: Aleutian Island Arc-Trench System".

THE JENKINS COMPANY. Rare Books and Documents. Box 2085, Austin, Texas 78767. *Catalogues free.* [Jenkins Publishing Co., & Adolphus Bindery, Inc. are both part of The Jenkins Company.]

Rare Maps of the United States: Catalogue 94. Area is main entry, some full descriptions, references in cartobibliographies cited where applicable, prices range from high of \$1,850. to low of \$50., with average \$215, mode price \$200., most frequently cited prices: \$100., \$150., \$175., \$200., \$250., \$275. 38 of the 129 items depict areas within WAML's region.

REPUBLIC OF SOUTH AFRICA. Government Printer, The Government Printing Works, Private Bag X85, Pretoria. *List free.*

Official Publications Issued During the Month of June 1975. Includes all newly issued maps in the 1:50,000 Topographical First Metricated Edition, new issue in 1:250,000 topo-cadastral series (reprint), other series including sheets of the Development Atlas.

L. S. STRAIGHT. Post Office Box 106, New York, NY 10016. *Catalogues free.*

Americana: Catalogue 293. 78 items listed in 8 1/2" x 11" mimeographed sheets. Six depict area within WAML's region. A mixture of maps and prints from various sources, includes a 1901 Cram map of Los Angeles city which depicts the "Official Bed of the Los Angeles River" @ \$25.00. Prices range from high of \$75. to a low of \$7.50, with average price @ \$21.83, mode price is \$15.

TEJAS GALLERIES. Rare Maps. 601 Rio Grande, Austin, Texas 78701. *Cat free.*

Catalog 17. 298 items, catalog offset litho, many items illustrated, a useful and welcome "index" - although compiler admits it's not comprehensive to all entries. Worldwide coverage, maps represented range from early 15th C. to late 19th C. Many of the master cartographers, text describing each entry well referenced and supplemental text is an education in the history of cartography. Prices range from a high of \$2,750. (for the First American Atlas) to a low of \$15., average price \$117., mode \$25., other prices most often asked are: \$17.50, \$22.50, \$30., \$40., \$50., \$150.

U.S. GEOLOGICAL SURVEY. National Center, Reston, Virginia 22092. *free*

[a brochure] Public Inquiries Offices of the U.S. Geological Survey. Cites location of each office including mailing address and phone number. Indicates what maps are stocked by each office.

U.S. GEOLOGICAL SURVEY. EROS Data Center, Sioux Falls, South Dakota 57198. *free*

[a price list] Prices as of Aug. 1, 1975. An analysis of today's prices compared with previous lists shows: 9" x 9" black & white positive photo print - 1973 = \$1.75 - 1975 = \$3.00; color composite of ERTS/LANDSAT photos - paper print @1:250,000, \$30. in 1974 - new price \$40.

U.S. NATIONAL OCEAN SURVEY. Distribution Division C-44, Riverdale, Maryland 20840. *Catalogue free.*

Catalog of Early Nautical Charts. NOS has published a catalog of their contribution to the Bi-centennial celebration, an offering of 49 early engraved charts - newly hand-pulled prints from the original copper-plates (specially brought out of the vault for this occasion). Each item is illustrated, priced, and the number of each limited edition given. Prices are generally \$3.50 for litho prints, \$7.00 for engraved prints (the latter includes a certificate of limited edition).

Reproductions of Aerial Photographs. This title is a brochure, 8½ x 11" folded into a six-panel leaflet, describing information and instructions for purchasing and ordering aerial photos. Oct. 1975. *free*

~ Occasional Publications of the Department of Geography, University of Illinois, Urbana, IL 81801, has announced the publication of two new papers:

No. 8, by Siim Sööt, *Methods and Measures of Centrography: a critical survey of Geographic Applications.*

Abstract: Centographic measures have been utilized for decades to draw generalizations about areal distributions. They have proven useful in temporal and comparative analyses in discerning trends and contrasting population distributions. Misconceptions relating to the mathematical derivations, and analytic and descriptive properties of many of the basically simple centographic techniques which have arisen are explicated in this paper. This is done in a framework of a geographic literature review of three measures of central tendency (mean center, median center, and point of minimum aggregate travel) and four measures of dispersion (standard deviational ellipse, bicircular quartic and sectogram). The merits of each measure are specified and contrasted with those of similar measures.

No. 9, by J. Ronald Eyton and Judith Parkhurst, *A Re-evaluation of the Extraterrestrial Origin of the Carolina Bays.*

Abstract: Controversy as to the origin of the Carolina Bays has centered on terrestrial versus extraterrestrial theories. Meteoritic impact has been considered the primary causal mechanism in extraterrestrial models, but alternatives such as comets and asteroids have not been adequately considered. Comets may explode during fall and produce depressions which would conform to the morphology of the Bay. Only a comet appears to satisfy the constraints imposed both by extraterrestrial requirements and observed terrestrial characteristics.

These papers are available at \$1.25 per copy.

~ Australia. Department of Minerals and Energy. Division of National Mapping. *Maps of Australia and Australian Territories.* Edition 2. July 1975.

Air Photographs and related products. Edition 2. July 1975.

Both distributed free: Director of National Mapping, AMP Building, Hobart Place, Canberra City, A.C.T. 2601, Australia.

~ HUBBARD. 2855 Shermer Road, Northbrook, Illinois 60062.
Science Books and Raised Relief Maps. 1975-76 Catalog.

[EDITOR'S NOTE: The raised relief topographic maps, 1:250,000, formerly produced by the U.S. Army, are now listed at \$11.95 each.]

~ THE GEORGE F. CRAM COMPANY, INC. 301 South LaSalle Street, P.O. Box 426, Indianapolis, Indiana 46206.
American and World History Maps: American, World, Ancient, Medieval, Modern, Early European, Modern European. 1975.

[EDITOR'S NOTE: These are maps designed for classroom use, available on typical mountings.]

~ THE CARTOGRAPHER. Catalogue I. Maps, Atlases and Books *a propos* the rise and development of cartography. Richard B. Arkway, proprietor; 168 Governor St; Providence, Rhode Island 02906 (phone (401) 751-0492 - Cable "MAPS" Providence, R.I.

38 items: prices range from low of \$55 to high of \$5750.; average price is \$1019., mode price is \$375. The \$5750. item is #16, which is the *Le Rouge, Atlas Ameriquain Septentrional*, Paris, 1778.

- ~ NICO ISRAEL, Rare Books, Keizersgracht 526 Amsterdam 1002, The Netherlands. Catalogue 17: *A selection of one hundred and ten old & rare remarkable books maps atlases*. Cables: ENNIBOOK Amsterdam Telex 14070 ASHNI. Cable word for this catalogue is "remarkable".

This catalogue is, indeed, remarkable. Eighty pages, beautifully lithographed on slick litho paper, the catalogue is illustrated and indexed by subject. Prices range from a low of Dfl. 575. [Dutch Guilders = 38¢ ea. U.S.] to a high of Dfl. 195,000. [\$74,100]. Average price is Dfl. 18,403. [\$6,993.], and the prices most often asked are: Dfl. 1950.; Dfl. 6500. The most expensive item is *Chroniques de France*, Paris 1493. Folio. Three volumes. Item 98 is a John Speed atlas of 1676: *The Theatre of the Empire of Great Britaine... with ... a Prospect of the famous parts of the World*. Dfl. 48,000 [\$18,240.].

- ~ GEOLOGICAL MAP SERVICE [Telberg Book Corp.], Sag Harbor, New York 11963. Recent acquisitions of atlases and maps, itemized on mimeographed pages, loose-leaf, for insertion in their Detailed Catalog.

All map libraries should be receiving these on a regular basis. Telberg specializes in the Slavic countries, especially USSR maps, principally earth & marine sciences. New offering: *ATLAS OF OCEANS: Vol. 1, Pacific Ocean*. ca\$150.

- ~ METROPOLITAN COUNCIL, Public Information Office, 300 Metro Square Bldg., 7th and Robert Sts., St. Paul, Minnesota 55101

The Metropolitan Council's Library is one of WAML's Institutional Members, for which we are thankful. The Council produces maps of the Twin Cities area [Minneapolis-St. Paul], and we list them here [with thanks to the "Current Announcements" section of University of Minnesota's Map Division *Current Announcements & Selected New Acquisitions*, September 1975 issue]:

Population Distribution	50¢	[With the exception of the
Employment Distribution	50¢	Political Boundaries map
Political Boundaries	no charge	@ 8½" x 11", all others
History of Municipal Incorporation	25¢	measure either 17" x 22"
Solid Waste Disposal System, January 1975	25¢	or 33" x 33".]
Population Distribution of Minorities	25¢	
1975 Metropolitan Transit System	25¢	
1970 Census Tracts	25¢	
Population Distribution of the Aged	25¢	
Protection Open Space Plan-Soils	25¢	
Protection Open Space Plan-Water Bodies, Wetlands, Floodplain	25¢	
Regional Recreation Open Space System Plan, Dec. 1974	25¢	
Urbanized Land-1973, Twin Cities Metropolitan Area	50¢	
1975 Legislative District Map	25¢	
Twin Cities Metropolitan Area Health Facilities, Sept. 1974	25¢	
Health Planning	25¢	

The following are reports from the *Metropolitan Development Guide*, also produced by the Metro Council. The reports contain 8½" x 11" maps and fold-out maps, but they are not available separately. Reports: Development Framework (1975); Airports (1973); Health (1974); Housing (1973) w/revisions (1975); Law and Justice (1973); Protection Open Space (1973); Recreation Open Space (1974); Waste Management (Sanitary Sewers) - Draft for Public Hearing (1975). (no charge); Solid Waste (1970); Transportation - Draft for Public Hearing (1975), (no charge); Water Resources (1973). \$1.50 each, except those noted.

■■■■■ JOB OPENING

The *Information Bulletin* has learned that Ball State University has an opening for a Map Librarian for their new University Library. The position, a faculty appointment, requires someone with a Master of Library Science degree with as much geography as possible. Since the position has not yet been advertised, the salary range, and other details of the appointment are not known to us; however, an inquiry on Oct. 28 confirmed that the position is open and that it will be several weeks before a decision on selection will be made. Contact: Dr. Ray Suput, University Library Director: Ball State University, Muncie, Indiana 47306, phone (317) 285-6261.

Ball State University's need for a Map Collection assistant (with at least a B.A. in Geography), a 12-month job at \$480 - 490 per month, has been filled.

■■■■■ NEWS NOTES [more on pp. 28-32, 35]

- ~ The Membership, as assembled for the Business Meeting at Fullerton on October 25th, 1975, voted unanimously to add the publication *GEO ABSTRACTS, part G - Remote Sensing and Cartography* to its list of Exchange publications.

GEO ABSTRACTS G: Remote Sensing and Cartography is edited by Keith Clayton, and published by Geo Abstracts Ltd., University of East Anglia, Norwich, NOR 88C, England. Margaret A. Bass, Geo Abstracts Ltd., indicates that they would like to abstract the articles in the *WAML Information Bulletin* and each *Occasional Paper* in the G series.

- ~ The *International Directory of Current Research in the History of Cartography and in Carto-Bibliography*, No. 1 (1974), compiled and edited by Professor Eila M. J. Campbell and P. K. Clark. London, Imago Mundi Ltd., 1975.

Enquiries concerning purchase of this directory should be addressed to Prof. Campbell, Imago Mundi, c/o The Geography Department, Birkbeck College, 7-15 Gresse Street, London W1P 1PA, England.

A second issue of this *Directory* is planned for July-August 1976. If you know of any research in this field being conducted, please submit complete details to Prof. Campbell at the above address.

- ~ **FORTHCOMING MEETINGS:** The 8th International Cartographic Conference will be held in connection with the joint IGU/ICA meetings at Moscow, USSR, August 3-10, 1976. A "call for papers" appears in *The American Cartographer*, Vol. 2, No. 1, April 1975, p. 93. Deadline for submission of abstracts of papers was June 15, 1975, but those who intend to visit Moscow at that time may wish to attend and hear the presentations.

The 1976 Annual Meeting of the American Congress on Surveying and Mapping will be held in Washington, D.C., February 22-28, 1976 at the Washington Hilton Hotel.

The Fall Meeting of the Western Association of Map Libraries will be held on Thursday, September 23, and Friday, September 24, 1976, with a field trip planned for Saturday. Site will be on the Eugene campus, University of Oregon, and jointly on the Corvallis, Oregon State University. A field trip to the OSU marine laboratory on the coast is planned.

Edward Thatcher, University of Oregon, Map Library, 165 Condon Hall, Eugene, OR 97403 is coordinating the event.

[Forthcoming Meetings, continued p.35]

Oregon Atlas

By **ROBERT B. FRAZIER**

Register-Guard Editorial Page Editor

Call this a progress report.

Almost three years ago I wrote about a magnificent dream, an atlas of Oregon. It is the brain child of William Loy, associate professor of geography at the University of Oregon. The idea was to produce it in the university's centennial year, next year, as a present to the people of the state.



Bill Loy and other members of the geography department have been plugging away. It is "almost on schedule," which means that the deadline of a year from next October will probably be met. If, this far ahead of publication, a project director is "almost on schedule" that's pretty good.

Even in the summer, the second floor of Condon Hall on the campus is busy with people with Exacto knives and calculators, rulers and templates. The Atlas is coming along.

An atlas is not just a map. It tells much more about the piece of geography it illustrates. Where are the churches? Where do the sheep live? How warm and how cold does it get in Astoria or Klamath Falls? How much does it rain? What percentage of the people in a given area are over 65? How much do they pay in rent? Where are the migrants? What are the circulation areas of the newspapers? Which Indians lived where and when? How long is the growing season in Morrow County? Where is Morrow County?

Bill Loy and his group have been gathering this information. Now it's being transposed from notes to sheets of plastic. Those sheets will produce the Atlas. No paper, no ink. Just plastic. This saves a step in the production process.

The Atlas will be in color, of course,

but Bill Loy doesn't talk about colors. He speaks of "inks" instead. There will be four — black, yellow, warm red, and "cyan," which most of us call blue. Combined, these four "inks" can produce 62 shadings, scrambled on a page to show an astonishingly lot about the state.

A page of text will face each map page. Professor Clyde Patton of the department is writing the text. Professor Loy is project director and the principal map maker. He didn't start out as a cartographer (map maker), but as a specialist in land forms. But he picked up cartography along with his other studies and in the Navy.

Stuart Allan, a graduate assistant in the department, is in charge of checking and rechecking all the facts. One of the problems is that once a "fact" is printed in the Atlas it will probably be used again and again by other people. A mistake could lead to many more mistakes in other places years in the future.

Robert D. Plank, a geographer on leave from Humboldt State College in California, is in charge of producing the thing, no small job. Susan Mas is compiling a gazetteer, a list of names and an elementary identification of them. This gazetteer is only the first step toward a greater gazetteer which somebody in the department will work on when the Atlas is finished.

The faculty of the geography department, one of the most imaginative and exciting on the campus, is the editorial board. The board recently came to grips with a tough question: Should the information be presented in metric terms or in the old British measurements of inches, feet, yards, acres, miles and Fahrenheit degrees? The board voted, narrowly, for going metric.

This will be tough on those of us who still think in the old terms. Yet, the country is going metric. The rest of the world has already gone that way. To be of lasting value, a major work of this kind has to recognize real-

ity. Loy assures the skeptics that conversion tables will be scattered around liberally. He and Patton both urge the reader not to rely too much on those tables. "Think metric," is their advice. As Patten puts it, "If you want to know how warm or cold it is at 25 degrees centigrade, just step outside and find out."

What will the Atlas look like? It will be 224 pages of quality paper between quality hard covers. Size will be 11½ by 14½ inches (and don't ask me how many centimeters, millimeters or hectares that is), bound on the short side. It will weigh in at around four pounds and, Loy hopes, will sell for about \$14.95. Inflation could drive up this price.

It's already cost a huge amount of money, although "cost" is perhaps the wrong word. The outlay has been an investment rather than an expense. Most or all of the cost should come back as the books are sold.

Money has always been scarce. Loy has scrounged volunteer help in labor and materials. Much of the early work he did himself on his sabbatical year. Other labor has been volunteered or commandeered. About 100 students have worked on it as a class project.

When the Atlas is done it will have cost about \$287,000 — not just in cash, but also in help of various kinds. A problem remains. Loy and his dedicated band still need \$112,000 for the final production of the books. They'd like to get this money as gifts, with the return money going to the University of Oregon Development Fund. That failing, they'd like to get loans which would be paid off by the sales.

Loy seems optimistic about raising the money. The long, hard work has been done. In time, if not in money, he and his crew are just inches (or centimeters) from being done. When the book comes out a year from October, not too far from Christmas, it will be something that everybody who is truly interested in this state will have to have.

Town of Worcester-Massachusetts, circa 1776

William J. McCall, Map Librarian, Clark University, Worcester, MA, and new Associate Member of WAML, brings the following to our attention:

Lawrence A. Bowring, cartographer, has produced a very accurate and beautiful map of Worcester, inspired by the Bicentennial celebration.

Title: The Town of Worcester-Massachusetts, circa 1776. Size: 55 cm. x 75 cm.

Structure: Heavy paper, rag content, black ink, hand drawn, detailed border embellishments of area flora.

Cartographics: Town plan replete with historic sites, dwellings of famed area residents. Inset placing Worcester within surrounding towns, utilizing measurement methods of the time.

All copies are signed by the cartographer. Copies are available from: Lawrence A. Bowring, 123 Morningside Road, Worcester, Massachusetts 01602. \$10.00 each, including shipment in tube.

NEW CREASES IN MAP BUSINESS

SAN JOSE (CA.) MERCURY-NEWS, March 9, 1975, p. 33:

Despite a few attempts to charge for the service, the practice of handing out free highway maps is in no danger in the United States. But major changes in the highway map business are coming nonetheless.

To cut costs, most oil companies no longer provide detailed, often-updated city maps. Each map costs about a dime to print and distribute.

Mapmakers disagree with the move. "We contend," says James R. Mahoney, national sales manager for H.M. Gousha Company, "that a city map is much more important than a state map."

It's easy, he adds, to drive from state to state or city to city, but finding the way in a complex city can be hard - and even dangerous....

Gousha, an affiliate of the Times-Mirror publishing empire, is one of three major map-producing companies in the United States. General Drafting in New Jersey provides all the Exxon maps. Gousha and Rand-McNally split up the rest of the service-station business between them.

Oil companies also are looking at different size maps, perhaps smaller than what they have been. Arco dealers in some areas, when asked for a road map, simply tear a sheet off a gummed pad. They're not as fancy but, say motorists, it's better than paying for them.

Other stations offer a stock map which is not printed to the specifications of any one oil company. Oil companies also limit the number of map titles which a given station can stock. All oil companies and mapmakers agree that the business is a mass of confusion.

Meanwhile, Standard Oil of California (Chevron) is charging 15 to 25 cents for its maps in nine Western states, a practice begun almost two years ago. And last fall, Standard of Indiana (Amoco) started a map-vending test in 50 stations around Richmond, Va., but dealers see the test as meaningless because all other major oil company outlets still offer free maps.

[EDITOR'S NOTE: Thanks to Roy Boswell for the above item. Your Editor, upon arriving back at the San Jose airport from the Fullerton meeting, was delighted to find a free map available at Avis rent-a-car counter; but, alas, it was three years out-of-date. As the article above cites, the Avis counter had a tear-off pad of maps, out for the public to take; printed on very thin paper.]

CLASSIFIED, 42

This ad is reprinted here, not as a paid ad, but as an item of interest to readers of the Information Bulletin.

Read this in relationship to the news item entitled "New Creases in Map Business" (preceding page)

23-5380 EANUP RATES Pages reasonable 34-7-23-197p Free esti- all Randy, 34.8.1.205p	34—Business Service Directory TREE SERVICE SMITH'S TREE SERVICE Topped — Trimming — Removing Free Estimates — Insured 475-0845 or 426-8656 34-7-31-204p	34—Business Service Directory TYPING & SHORTHAND BUSINESS Typing & Shorthand. Accurate & Efficient. Call 475- 7051 after 1:30 p.m. 34-7-25-199p.
	Bo&Wy's Tree Service Trees Topped, Felled, Bucked, Etc. Free Estimates. 475-0477. 34-8-5-208p	CLASSIFIED ADS DIAL 426-8000

SEWORK.
AY OWN
13-9353.

stever ii
hing too

Y. Cliff
i. Fire-
rs. Ph.
29,202p

service.
g, elec-
ry. No
ergency
8-8-211p

house-
erprise,
73,188p

ING
127-3868

sinting,
tic file
dyman
hourly
72.

ing
llmate.

Exp.,
ivable
nates.

ALL

rior
Free
077.

3LE
3568

36—Business Opportunities

**THE ROAD TO SUCCESS IS IN
RAND McNALLY ROAD MAPS**

FREE MAPS ARE BECOMING AS EXTINCT AS
THE AMERICAN BUFFALO AND 25¢ A GALLON GAS

Tremendous Opportunities on Ground Floor now exist as result of vacuum in availability of maps. AMD automated map distributors is moving to fill this gap in every city and state in the country. Now — as an AMD dealer you can get on this road to success, stocking world famous Rand McNally maps in prime selected locations, that virtually need this service for their customers . . . Service stations, motor hotels, motels and highway restaurants report 25 to 50 requests per day for maps (they don't have) . . . With over 120 million cars and trucks traveling on over 3.5 million miles of highways in the U.S. paying approximately 60¢ per gallon for gas, the need for city, state and U.S.A. road maps is not only critical but essential to conserve precious fuel, time, and money . . .

Company: Secures Prime Locations! and Installs Equipment!
Provides route cards, business forms, bookkeeping system and Guaranteed inventory buy-back. Instructions on operating and maintaining business and equipment.
Excellent tax write-off benefits on Equipment. Virgin territories!
Minimum cash investment \$1590. (mini-route), or \$2990. (regular route) up to \$8990.00 (full size route).
Applicant should have car, 4 to 8 spare hours weekly, honest, reliable and sincere desire to own and operate his own business. If you meet these requirements plus have the available capital and can start operating business within 30 to 45 days, then write today, please include phone no. and your address, to:
AMD div. of Lincoln Consolidated Industries
9812 W. Main St., Belleville, Illinois 62223
36,8,10,188

NOTICE
The Sentinel attempts to determine the reliability of the advertiser in all acts where an established business is not offered for sale.
If cannot, however, guarantee all such offers. We recommend that you investigate fully before you invest.

Employment

41—Help Wanted

All job offerings are published under unified headings—
Help Wanted and Help

S
415
GI
Acc
Ing,
nice
AC
N.C.
shift.
CALI
SEC
REC
Type
greet,
SAL
Buildi
potent
CALL
BOC
Good
posting
fice.
CREI
REPR
Proven
Promin
age.
CALL
BRA
Branch
savings
Cruz.
Rapi
& loan
of ou
creat
dividu
or ma
& loan
you a
motive
with
your
Sentin
Oppor
N
Are
with
fions:
as br
comn
CAI
AAR
602 A
Retir
profe
Betr
Cour
ed e
betv
L.V
P
A
C
F
R

THAT FAMOUS MAP IS BACK IN TOWN

SAN FRANCISCO CHRONICLE, Monday, Sept. 8, 1975, p. 24 -

The Ferry Building's great old relief map of California - which fascinated everyone whose childhood occurred here between 1924 and 1960 - started on its comeback trail last week.

The 40-ton, 500-by-18 foot painted plaster-and-muslin replica of the state's entire topography - complete with 800,000 hand-carved buildings - arrived here in 186 5-by-7 foot crates aboard six big trucks from a Redding warehouse.

The dusty sections - conveyed courtesy of Greyhound Exposition Services, Inc. to its 200 Brannan street warehouse - are to be refurbished over the next few months, and then sent out as a mobile exhibit for bicentennial events aboard ten 50-foot display trucks.

The sponsor for the famous old map's \$800,000 revival plan is a non-profit foundation called the California State Foundation, especially invented for the purpose by a Los Gatos real estate development and investment man, Richard P. Karman. "I just got hooked on that map," Karman said yesterday.

Karman said the San Francisco segments of the map will be rehabilitated first, in South San Francisco at the cooperating Greyhound Exposition Services' Utah street plant, and will be shown "somewhere in San Francisco" this fall.

Next year, plans call for the entire exhibit to be shown not only throughout the state but around the nation.

The map was originally installed as an immensely popular attraction at the Ferry Building in 1924. San Francisco bought it for a token \$1 in 1953 in order to move it out of the way of a planned Center. The city voted \$10,000 in 1960 to pay for "dredging it in the bay" - as Karman recalled - but instead sold it for another token \$1 to a Redding real estate man, who took it to Redding in hopes of showing it as a tourist attraction. But the space it required proved forbidding. It was warehoused. "So," Karman recalled, "I heard about it, and in 1972 got to the point where the California State Foundation managed to buy it again for \$1. No, that's not true. With tax, it was \$1.04. It cost \$145,000 to build originally. Our bids for just refurbishing it range from \$200,000 to \$400,000."

BATTLE OVER ORIGINAL S.F. MAP

SAN FRANCISCO CHRONICLE, Wednesday, Oct. 8, 1975, p. 4 - by Michael Grieg:

A county clerk in a small Oregon town and a Superior Court judge here are in a war of words over the rightful ownership of the original map of San Francisco.

At issue is an official map made in 1849 that shows a street-by-street view of San Francisco as it originally existed. The illustrious map now hangs in the office of the Clackamas county clerk in Oregon City (population: 9176), where it was filed for copyright in 1850 when the small town was the U.S. District Court site for the Oregon-California Territory.

"Oregon City may not have much else but it does have the original map of San Francisco", said George Popten, the Clackamas county clerk. "I'm custodian of the records, and I have no authority to part with such a valuable article. It would take an act of the Oregon Legislature, and that might not be all that's needed." The county clerk was referring to relentless efforts by Superior Court Judge Harry Low and other board members of the San Francisco Historical

Society to get the early city layout. Twice rebuffed, Low and other local history buffs wrote a letter to March Fong, California's secretary of state, urging her to intercede with Governor Bob Straub of Oregon. The letter drew the fire of Popten and Sid Brockley, chairman of the Oregon City Bicentennial Commission, who exhorted the governor to resist "moves afoot to confiscate the original plat of San Francisco" from "legitimate" Clackamas county archives.

With San Francisco's bicentennial celebration in the offing, Judge Low was set on "our equities in the matter." "This important document has sat up there for 125 years, purely the result of a historical accident that once made us part of the Oregon Territory," he said. "It's time the map came home. Fairness and good conscience should prevail. Why, if we had the original map of Oregon City in Clackamas county, we certainly would hand it over to them."

But Popten said that he and fellow Oregon City boosters were not about to give up what they consider "a big tourist lure." "We get at least 300 people a year who come by here for a look at that first real map of San Francisco," he said. "I provide them with certified copies on real parchment paper that has a gold seal. All we charge is a minimal \$1 a copy for that big 2-foot by 3-foot map."

Copies of the historic map, measuring a scant 20 inches by 30 inches and printed on a lower grade antique stock paper, are also for sale at the San Francisco City Hall visitors center. The San Francisco charge is \$2.

According to the legend on the map, it was drawn when the city was a bustling Gold Rush community by Alex Zakrzewski, an "ex-Polish officer," from William M. Eddy's original survey. San Francisco didn't extend farther on the map than Larkin street on the west or Townsend street on the south, and only a portion had any construction. The original shoreline of the city is clearly shown. A lagoon extends from Montgomery street, once the waterline, into Jackson street.

NEW GEOLOGICAL MAPS

If you are interested in new geological and related maps, there is now a monthly column of just such maps in the journal *GEOTIMES*.

The column is written by Robert A. Bier, Jr. and Janice T. Fitzpatrick, map librarians at the U.S. Geological Survey Library in Reston, Virginia.

Each month the column lists about 20 of the more significant or interesting maps that the library has received and which have been published within the last three years. These include maps covering entire states, countries, continents, space or areas of special interest to geologists. These maps come from many sources from all over the world. The subjects covered include geology, soils, vegetation, geophysics, mineral resources, oceanography, water resources and other similar subjects. When available, information on where to get an item and its cost are included.

GEOTIMES is published by the American Geological Institute and costs \$9 per year. The address for a subscription is: Geotimes, 5205 Leesburg Pike, Falls Church, VA 22041.

THE WORLD OCEAN ATLAS

Pergamon Press, on December 1, 1975, will publish Volume I of the above title which will cover THE PACIFIC OCEAN. Edited by Sergei G. Gorshkov, Admiral of the Fleet of the Soviet Union and Commander-in-Chief of the Navy, Volume I will be divided into seven sections: Ocean Bed, Hydrology, Biogeography, History of Ocean Exploration, Climate, Hydrochemistry, Reference & Navigation/Geographical Charts (1:12,000,000). 350 pp, 35 x 46 cm. \$300 list price; pre-publication price until 1 Dec. 1975: \$200. Pergamon Press, Elmsford, NY 10523.



MEXICO'S CETENAL:

La Comision de Estudios del Territorio Nacional

by

P. R. Martinez-Perry
 Social Science Reference and Map Librarian
 San Jose State University
 San Jose, California

Mention of CETENAL first appeared in the WAML's *Information Bulletin* in Vol. 3, No. 2, March 1972. This article's aim is to describe the purpose and some of the functions of CETENAL and to provide up-to-date information on its map series.

PURPOSE AND ORGANIZATION

CETENAL, the Commission of Studies of the National Territory was created by the Secretariat of the Presidency. This secretariat is responsible for planning, and the coordination of the activities of governmental agencies; but it also is responsive to the interests of private enterprise. CETENAL initiated its work officially on the first of October 1968. Its purpose: to carry out an inventory--to be up-dated at least every five years--of the natural, human, and economic resources of the nation. This data will then be available as the basic information for integrated planning, not only of regions, but also of particular economic, social, and other factors.

By means of a Consulting and Coordinating Committee formed by representatives of 18 federal agencies, CETENAL communicates, collaborates with, and unifies work and research with the various organizations of the federal government. This collaboration is extended to the state and municipal level. This arrangement eliminates duplication of effort, time, and money and by concentration of means, speed, quality, and production are greatly improved; continuity of projects is practically assured.

CETENAL is responsible only for national mapping, but duplication of effort is avoided. CETENAL is also responsible for surveying and mapping the national frontiers in cooperation with neighboring governments.

PERSONNEL, EQUIPMENT, and TECHNIQUES

One month after its formation CETENAL consisted of 15 professionals and technicians. This original nucleus trained other specialists and they in turn trained others after them. Mexico has the resources to train Third World cartographic personnel and on occasion has done so. Now the organization consists of about 50 groups of professionals and technicians which total over 1,400. Of these, 63% are considered professionals.

Equipment includes Italian and Swiss stereo plotters of which there is an ample number as they are under-utilized, at this time. The soil laboratory equipment includes a Dutch x-ray Spectrometer and an IBM 370 computer is used for computations. Field equipment includes helicopters, airplanes, and, of course, aerial cameras.

The system of soil classification used is that of FAO-UNESCO, supplemented by the 7th approximation, USDA, 1960. All relevant data is stored for use by computers. It is planned to divide the country into cells one kilometer square. These cells can then be electronically manipulated in numerous ways

to combine or provide data for general and special studies.

TYPES OF MAPS

Of course, all CETENAL maps use meters only. In the topographic 1:50,000 (1 cm. = 500 m) and 1:100,000 series, contour interval is 10 m. The 1:100,000 topographic 31½ x 44 cm. is handy, but not particularly easy to read. The resource map series: Carta Geologica, Carta Uso del Suelo (Land Use), Carta Edafologica, and the Carta Uso Potencial (potential use, but not necessarily its present use) are all at the scale of 1:50,000. The fifth resource map (new as of 1975) Carta de Recursos Culturales y Recreativos is at the scale of 1:250,000. This map is a very interesting one as it shows location of archaeological sites, waterfalls, springs, and other items of cultural and recreational use as its name implies. The verso of the sheet shows detailed information as well as a description of tourist facilities and services. It was designed to provide useful data for the planning of national tourism. It is planned to produce all the resource series maps also at a scale of 1:250,000. Naturally, detailed studies of geology, land use, soils, flora and fauna are required for the compilation of the map series. All this data is stored for use by computers.

There is also a Carta de Climas which covers Mexico in 45 sheets. On the verso of each is a graph of each station used. These maps were produced in cooperation with the Instituto de Geografia of the Universidad Nacional Autonoma de Mexico. Scale is 1:500,000.

For towns of 5,000 - 40,000 population there are Fotomapas Urbanos at the scale of 1:5,000. For cities of 40,000 or more there are Mapas Urbanos at 1:5,000. This makes a total of 9 types of different map series at this time. In the future other special thematic series will be produced. At this time there appears to be no hydrographic chart in the offing and the aeronautical series appears to have been dropped. The 1:1,000,000 series is to be compiled with the aid of earth satellite photographs and will be produced with the use of electronic computers. Eventually the 1:1,000,000 series will be used for the compilation of the *Atlas de la Republica Mexicana*.

COVERAGE

By the end of 1974 more than half (1,200,000 km²) of Mexico's territory had been covered by aerial photographs. And at the end of 1973 around 500,000 km², one quarter of the country, had been surveyed for topographic coverage. In August 1974 triangulations were proceeding at the rate of 30,000 km² per month. Most of the work has been carried out in the center of the country. It is now including Baja California Norte and for the moment the north and southeast are not at the top of the priority list. Within very few years (before 1980?) the complete preliminary survey of all the country using modern techniques should be accomplished.

In April 1975, 445 towns in 21 states (out of 31) were available on urban photomaps. As of July 1974, there were urban maps available for only 5 cities. Since compilation of these maps is proceeding at a slow rate it has been thought to use perhaps orthophotographs to speed up the process. Every 3 months indexes are produced showing new sheets available.

MATERIAL AVAILABLE AND PRICES

In addition to map sheets there are other related materials available from CETENAL such as: aerial photographs in black and white or color at various scales 1:25,000 and 1:50,000, negatives and enlargements, field reports, urban population data reports (fichas de poblacion) for towns of 300 - 10,000

population (give number of schools, pupils, public services--water--etc.). .

As of September 1975 prices for most maps were \$10. pesos ea. (80¢ U.S.). Exceptions were: urban fotomaps \$100. (\$8. U.S.), and urban maps \$40. (\$3.20 U.S.) per sheet. All orders must include \$5. pesos (40¢ U.S.) for bank-draft handling charges.

Address orders to:

Unidad de Agencias
CETENAL
San Antonio Abad #124
Mexico 8, D. F.

For special information add: Ing. Benjamin Mendoza Montiel, Jefe de la Unidad de Agencias.



[continued from p. 27]

MORE NEWS NOTES

WAML ELECTION RESULTS: The results of the 1975/76 Election [conducted by mail ballot] were announced by Past President Gail Nichols, as follows:

Vice President/President Elect: Phil Hoehn 48 ; Mary Larsgaard 1.
Secretary: Dorothy Mewshaw 25 ; David Lundquist 24.
Treasurer: Stanley Stevens 49.

NEVADA MINING & GEOLOGY: A bibliography of literature published on Nevada mining and geology from 1966 to 1970 has been released by the Nevada Bureau of Mines and Geology, a division of the Mackay School of Mines, University of Nevada, Reno. The author, Mary B. Ansari, WAML Member, and Mackay School of Mines librarian, has assembled more than 1,600 references to Nevada's mining and geology for the five-year period, including 92 entries describing unsigned articles and mining news summaries appearing in local and national press media. Entitled "Bibliography of Nevada Mining and Geology, 1966-1970", the publication, listed as Report 24, may be ordered for \$3.50 from the Nevada Bureau of Mines & Geology, University of Nevada, Reno, 89507.

FORTHCOMING MEETINGS (Continued): The 23rd International Geographical Congress and the XIVth General Assembly of the International Geographical Union will meet in Moscow, USSR, during July and August 1976. The *IGU Bulletin*, 1974, No. 2, describes the full details. The schedule is: Pre-Congress Symposia, July 12-26; Congress Proper, July 27-August 3; Post-Congress Excursions, Aug. 4-13, 1976. The IGU's contact for further information is: Dr. Yuri V. Medvedkov, Secretary-General, 23rd International Geographical Congress, Staromostnyi per. 29, Moskva 109017, USSR.

Registration fee for full participation in the Congress is \$63. Accommodations are extra, est. from \$56 to \$42 per day for either single or twin (with private bath), and two meals per day, plus transportation to the meeting site.

Send to: American Travel Association/Geographical Congress, 815 15th St., N.W., Washington, D.C. 20005 and ask for further details of the IGU Congress to be held in Moscow July-August 1976. ATA has been selected by the Association of American Geographers as agent for the Congress.

Ref: *AAG Newsletter*, Vol. 10, #8, Oct. 1975, p. 3.

Bench Marks!

PHIL HOEHN, WAML Vice President/President Elect, UC Berkeley Bancroft Library Map Librarian, attended the 25th annual Special Map Processing Project at the Library of Congress' Geography and Map Division in Alexandria, Virginia from July 7 to August 1. He was among the thirteen map librarians and graduate students, and his special assignment included taking inventory, preliminary cataloging, and dusting of the atlas collection. In exchange for his service, four hours each week were spent selecting maps and atlases for UC Berkeley from among LC's duplicates. Approximately 4,000 maps and 250 atlases were chosen, which will be distributed to the Map Room (General Library), The Bancroft Library, and the branch libraries of Earth Sciences and East Asiatic (all on the Berkeley campus).

ROSANNA MILLER, University Library, Arizona State University at Tempe, has been appointed Head, ASU University Library Map Service. She replaces WAML member Elizabeth Al-Hazzam who departed for a position in Saudi Arabia. [We incorrectly reported in the last issue of this column that Larry Bartis had been appointed to this position.]

MARY MURPHY, WAML Associate Member, Defense Mapping Agency Topographic Center, Washington, DC, has been appointed Editor, Bulletin, Geography and Map Division of Special Libraries Association, as of the December 1975 issue.

MARY SCHOLZ, WAML Member, Librarian, University of Santa Clara, as a result of her marriage in July, is now MARY GUEDON.

JOHN SCHROEDER, WAML Associate Member, formerly of the Map Cataloging Section, Library of Congress' Geography & Map Division, is now Head of the Map Section, U.S. Geological Survey Library at the National Center, Reston, Va.

EDWARD THATCHER, WAML Member, Map Librarian, University of Oregon, was featured in the Summer 1975 Old Oregon [Magazine of the University of Oregon Alumni Association]. The full-page article by Bill Lesyk includes a handsome photo of Ed and his Map Room. The article leads off with the following:

*A geographer fellow named Wurst
Acquired an insatiable thirst
As he fell into traps
Refolding his maps
In the way that they were at the first.
(Unknown)*

ALBERTA AURINGER WOOD, WAML Associate Member, is the new name of a familiar face to those who attend SLA G&M DIV meetings: Alberta Koerner, past-Chairperson of G&M DIV. Her new husband, Cliff Wood, is a graduate student in Cartography at the University of Wisconsin. Alberta has left her position at the Detroit Public Library to join Cliff on the Madison campus. She has accepted a temporary job as the map cataloger at the Map Library, under Map Librarian Mary Galneder. [Alberta's husband is the co-producer of the Map Scale Indicator on stable base polyester film, as reported in News Notes, this issue.]

STANLEY STEVENS, EDWARD THATCHER, and ALBERTA AURINGER [WOOD] KOERNER, each have reviews appearing in Literature and Map Reviews section of the Sept. 1975 Surveying and Mapping, pp. 264-267.

(Continued on p. 44)

NEW ACQUISITIONS LIST

The National Library of Australia's Map Collection has added to their regular quarterly *Australian Maps* [ISSN 0045-0677] a new acquisitions list: *Overseas Map Acquisitions* [ISSN 0311-9319]. The two publications together provide a comprehensive list of material received by the map collection.

It will be published concurrently with the former title. "Overseas maps make up seventy per cent of the existing collection and annual intake, and many are received on an exchange basis from the publishers. The listing is intended as a guide to the overseas map material received by the National Library, and provides brief bibliographic details of single sheet and series maps, together with lists of the individual sheets which make up series. At present there are no plans to index or cumulate the listing."

"The Library aims to achieve world coverage in topographic series at 1:1,000,000 (the International map of the world) and at 1:250,000, supplemented by maps at larger scales for more highly developed areas. Town plans of all major cities, regional road maps and other thematic maps are also considered to be of major importance."

The contents vary from issue to issue according to material received, but the following list of contents for the first two issues [i.e., January-March 1975 & April-June 1975] will give you an idea of the arrangement:

New Zealand	New Zealand	
Pacific area	South Pacific	
World	Universe	
Europe	World	
Asia	Polar regions	
Africa	Europe	
North America	Asia	
Central America	Africa	
South America	North America	Bibliographical works
Antarctica	South America	
Bibliographical works	Antarctica	Cartography

The fully indexed 1961-73 cumulation of *Australian Maps* is now available, price \$10.00. *Australian Maps* will be cumulated annually from 1974. The cumulations will be priced at \$6.00, the full service at \$7.50 (i.e., cumulation plus quarterlies). Orders will be accepted by: Sales and Subscription Unit, National Library of Australia, Canberra, A.C.T. 2600, Australia.

Maps and atlases were listed in *Australian National Bibliography* from 1961 to 1967. Atlases in book form, but not sheet maps, continue to appear in that publication. The first issue of *Australian Maps* covered the period from January to September 1968.

The 1961-73 cumulation includes a Directory of Australian map publishers, and indexes *Australian Maps* by author, subject and area. Cataloguing practices follow the rules and examples of Boggs and Lewis with slight modification.

The National Library's holdings of major map series relating to Australia, the whole Island of New Guinea and the British Solomon Islands Protectorate are shown in the loose-leaf Index atlas of maps in series in the Map Collection, National Library of Australia. [Canberra, National Library of Australia, 1966]

Society for the History of Discoveries

The 1975 annual meeting of the Society for the History of Discoveries was held in the Sir Francis Drake Hotel, San Francisco, 19-22 August. The choice of San Francisco was to coordinate with the International Commission for Maritime History of the International Congress of Historical Sciences, whose meetings were held at the nearby Fairmount Hotel, San Francisco, 22-29 August. Accordingly, the S.H.D. meetings had a truly international flavor as more foreign members and guests than usual were able to attend.

Sessions of papers entitled, "Islands Lost and Found", "South America: Who, What and Where", "New Sources and New Subjects", and a panel discussion "The North Pacific" were held. Field excursions were arranged to the Oakland Museum, the Golden Gate Headlands, and Drakes Bay/Point Reyes. A reception, at which many local dignitaries attended, was given aboard the Golden Hinde II at Pier 41.

The annual banquet was held in the hotel's Empire Room, where, as Warren Howell, San Francisco antiquarian book seller, recalled, Professor Bolton had first publicly displayed the Drake "Plate of Brasse" some forty years ago. The principal address at the Society's 1975 banquet was by Professor David B. Quinn, Vice President of the Hakluyt Society of London, who spoke on Drake's compatriot, contemporary and fellow explorer, Thomas Cavendish. Among others at the head table were Professor Michel Mollat, President, and Vice President and Madame Charles Verlinden of the I.C.M.H. The meeting was presided over by retiring President of the S.H.D., Professor Norman J.W. Thrower. President Thrower is succeeded by Professor Ursula Lamb, and retiring Secretary/Treasurer John A. Wolter by Ralph E. Ehrenberg.

Those interested in membership in the S.H.D. should contact the new Secretary/Treasurer Ralph Ehrenberg, c/o The Cartographic Archives Division, National Archives and Records Service, Washington, DC 20408.

WHAT IS AN HISTORICAL MAP?
Identifying, Maintaining & Acquiring
Historical Map Files
for the Engineer of the City of Los Angeles

by

Bernice Kimball
Historical Map Section of
Street Opening & Widening Division
City of Los Angeles



What is an historical map?
How do you sift existing material?
How do you identify trivia? Should it be weeded out?
How do you acquire missing information?
How do you determine what will be of value in the future?
How do you distinguish an obsolete map from an historical map?
How do you make the information readily available?

What is an historical map? The map by George for 1900 and the map by Stevenson for 1884 are easily recognized as being historical. Their style is

very different from the maps of today and readily draw the eye to examining details that are recognizable yet different from the southland of today. Not all maps can be so readily categorized: a Master Plan of Highways for 1945 is not interesting-looking nor does it have much detail, but it is important in planning highways. What then can identify a map as being part of history?

If history is a narrative or record of events in relation to some center of interest such as a nation, a science, an object, a person or career, then an historical map would be a record in relation to a center of interest - in this instance, in relation to the concerns of a city engineer. The city engineer is concerned with everything that relates to public works: streets, freeways, water systems and resources, wells and watersheds, flood control, sewage systems, geological stability, earthquakes, harbors and rivers. He is involved with every facet of the natural environment and the land uses, not only as conditions now exist but also as they have existed.

If, as in the City of Los Angeles, the King of Spain decreed that the streets were to be oriented at quarter-points of the compass, and subsequent American engineers followed the practice of President Thomas Jefferson and had streets run due north, south, east, and west, those streets would not coincide very well. Or if, as in many cities in the east, the custom was to pave old cow paths, it would constitute a mind-boggling problem for future traffic engineers.

If we build on former swamp land, it is reasonable to expect that the land may again become a swamp. If we leave disused rail lines buried in the streets, it is possible they will obstruct future excavations. The past contributes to the present just as the present has its influence upon the future.

Of what do the old maps of the city consist? What type of information is on them? Are they of any value?

There are no maps of the early Spanish and Mexican eras in the City's files. The State of California gathered the records of all its counties from those earlier days and kept them all in San Francisco; they were lost in the Great Fire of 1906. What information we have of these records is due to the work of Hubert Bancroft; he hired translators and worked many years to synthesize the maps and documents.

The first maps available are dated 1850; close scrutiny of some of them reveals that they may have been made as early as 1833, but they were recorded after the formation of the County of Los Angeles. Many maps of 1850 to 1900 are kept in the City Clerk's vault, originally bound in large books. The maps show street openings and extensions, public properties such as schools and the jail or parks; there are maps of dams, water works and sewer projects. They offer a wider amount of information than is encountered on current maps; many are handsome specimens of draftsmanship. In addition to an odd assortment of numbered maps from the City Engineer's series, there are also such maps as were given to the City by other cities at the time of consolidation with the City of Los Angeles.

The bulk of maps are in the City Engineer's vault. There are plain-numbered maps and prefixed maps covering all kinds of street work, assessment maps, right-of-way maps, condemnation maps, plans and profiles, drainage maps and district maps. There are maps of private engineers, private map companies and USGS maps. There are copies of official records of the County and Federal governments: Patents, Township surveys, deed maps, miscellaneous records maps, licensed surveys and subdivision maps. There are copies of county maps such as Clerk's Filed maps, Recorder's Filed maps, County Survey maps, County Index

maps or Wall Sheets, County Flood Control and County Road maps. Despite the broad spectrum of maps, there is, unfortunately, only complete coverage in the officially recorded maps which are intended to define property limits. Special subjects can be studied only by reference to a great number of maps after intensive research.

Which maps in the City Engineer's vault are historical? Inescapably, all of them are historical. Whereas some of them are only scraps of paper, a check of the early maps reveals that the majority of them represent an Ordinance or some other legal action concerning public property and public works, or were the basis for such action. Any map throwing light on a written document such as an Ordinance is worth keeping. If you have ever attempted to follow a wordy legal description, you know how delighted you were to find a clear-cut drawing to show exactly what was intended.

Unquestionably some of the vault maps are of small value, but even those which seem of little consequence at first glance may come under the spotlight. The Lecouvreur map of downtown Los Angeles with its fine detail showing even the party walls might seem to be of academic interest only, but if the existence of this map had been known and if it could have been located, it would have changed the six-figure settlement made by the city in a law suit.

Certain groups of maps have long been recognized as being important. One of these is the annexation maps which are used in determining assessment charges. Recently, the maps-of-private-water-companies was determined to have a similar value. The Department of Water and Power has been required to purchase any private water company within the city limits. Maps of the purchased companies were on file in their map room. The man who had been in charge for many years retired and several engineers did a thorough house-cleaning. Barrels of trash were thrown out, full of "obsolete" and "out-of-date" maps, including the now-important maps showing which properties were connected to a service at the time of the acquisition. The copies of some of these water company maps which were unearthed in the City Engineer's files were made available to our sister Division.

The search for contour maps has been going on for several years; there are still some to uncover. A map of the Los Angeles River when it overflowed its banks in the downtown area would be a real find, if it should exist. There was more success with the cable car routes. Cable cars have not been running in Los Angeles for many years; their existence was mostly forgotten and maps of their locations were just as forgotten. A contractor found a huge block of concrete while excavating in First Street close to City Hall; the puzzle was cleared up by a man who recalled standing on that corner as a little boy with a flag in his hand to wave as the first cable car went by. Maps of the routes followed have now been furnished to those with a need to know, so that there will be no further surprises of this kind.

Three years, 10,000 maps, scores of questions and dozens of books later, what is historical? Something historical is that which is significant now because it affects the present, as pollution upstream affects the water downstream. It includes what was done and what was not done, as definite limits of the Ranchos was something not done, and the Act of Congress setting difficult standards for proving land titles to the Ranchos, was something done, both resulting in hardships, injustice and confusion.

Historical maps include any condition or event that changes the land, whether natural or man-made. Oil wells, sumps, gravel pits and land fills, anything to do with water in this semi-desert land: waste disposal, roads and transportation -- all these subjects are of historical importance to a city engineer.

Historical maps must include its surrounding territory. The city occupies but a tenth of the area of the county, but because of its length and breadth and its central location, it is involved in the affairs of the County of Los Angeles: flood control, waste systems, roads, and other land uses involve cooperation of both bodies. There is a continuing need for maps that present the over-all picture.

The future will require information from us. It will want to know what we are doing today. What is the condition of our roads, what were our plans, what were our zoning laws, what did we do underground, what problems did we face and which did we solve or not solve -- all this it will want to know. It will also have problems we cannot foresee; the information we can leave will give a basis for future solutions.

PIRATE AND TREASURE ATLASES

by

Donald A. Wise
Head, Acquisitions Unit
Geography and Map Division
Library of Congress

The Library of Congress cartographic collections contain extensive atlas holdings on various subjects covering many different geographic areas. Some of the more interesting atlases include those related to pirate activities, shipwrecks, and treasure sites. This paper will discuss some of the unique examples which are in the Library of Congress collections.¹

The Library of Congress has a manuscript atlas attributed to William Hacke entitled, *A description of the sea coasts, rivers, & ... in the East Indies*, 1690.² This is known at the "Buccaneer Atlas," because it was made for and used by Captain Bartholomew Sharpe, a notorious pirate. In the late 17th Century, Hacke sailed for some time with Captain Sharpe in various expeditions to the South Sea, and seems to have been in a position of command - judging from the observations and directions laid down in his books. The atlas contains maps of the coasts of eastern Africa, India, and the East Indies. Each drawing bears a brief description with soundings, distances, and facts regarding anchorages and navigation of rivers which might be of value in pirating activities. No shipwrecks or buried treasures are shown on the atlas plates, but they are representative of the type of hand drawn charts which pirates had at their disposal.³

Another distinctive manuscript atlas in the Library of Congress collections is one by Jouhan de la Guilbaudière, *Description des principaux endroits de la Mer du Sud ...* 1696.⁴ The author of this manuscript atlas was one of the celebrated band of buccaneers under the command of M. de Gennes. La Guilbaudière was shipwrecked in the Straits of Magellan about 1688 and shortly afterwards joined the buccaneering expedition of M. de Beauchesne-Gouin as second in command. The manuscript atlas seems to have been compiled while engaged on this expedition.⁵ The atlas plates contain plans and views of towns, islands, ports, harbors, anchorages, forts, detailed accounts of the inhabitants of the surrounding country, their manners and customs. The maps are beautifully drawn, colored and shaded in elevation and perspective. The last four pages contain the route from Acapulco to the Philippine Islands. The work also contains a long glossary of buccaneer terms. Although no treasure sites are

shown, the atlas represents the type of cartographic information needed by pirates operating in the Pacific Ocean during the 17th Century.

The Library of Congress atlas collections contain a number of different editions of the Jefferys *West-India Atlas* ... and the Laurie and Whittle's *Complete Pilot for the West-Indies* For example, each of these atlases uses a number of the same Jefferys map plates with some modifications and minor changes. A comparison of the atlas plates in the 1775 Jefferys *West-India Atlas* ...⁶ with the 1805 Laurie and Whittle's *Complete Pilot for the West-Indies* ...⁷ shows some corrections or deletions on the following selected atlas plates:

<u>1775 West-India Atlas</u>	<u>Name of Atlas Plate</u>	<u>1805 West-Indies Pilot</u>
¹ Plate No. 10	----- <i>The Peninsula</i> ...	-----Plate No. 11
² "Spanish Admiral Inlet" is shown at Hillsborough Inlet.	-----	Deleted from plate.
³ Plate No. 13	----- <i>The Island of Cuba</i> ...	-----Plate No. 14
⁴ "Chesterfield Key" where the Kings Ship of that name was cast away."	-----	Deleted from plate.
⁵ Not shown	-----	Addition to plate: "Galleon wreck'd in 1765"
⁶ Plate No. 16	----- <i>The Bay of Honduras</i> ...	-----Plate No. 18
⁷ "Glovers Reef - wrecks" (3 symbols shown)	-----	Deleted from plate.
⁸ Not shown	-----	Addition to plate: "the Three Brothers Galleon St. Yago lost here."

What this exercise shows is that the serious historical researcher of treasure trove information should compare each of the atlas plates in all editions for leads to possible treasure sites or shipwrecks.

The use of modern techniques, such as SONAR, underwater cameras, and deep-water sampling devices, has resulted in the publication of *An Oceanographic Atlas of the Carolina Continental Margin* by the North Carolina Department of Conservation and Development in 1971.⁸ Three wreck charts appear on pages 17, 21, and 25. The wrecks are classified as stranded, partially submerged, totally submerged, and position doubtful. On pages 20, 24, and 29, wrecks are listed by geographical coordinates, name and type of vessel, date sunk (1750-1969), tonnage and length, and other information. The authors reviewed 1,200 shipwrecks in compiling the wreck list and were able to verify only 697 wrecks by specific location. The wreck charts are printed on a transparent sheet which can be used as an overlay to a National Ocean Survey nautical chart of the area. The atlas plate overlay has a geographic grid around the neatline subdivided into one-minute intervals. Many of the wrecks indicated were blockade runners during the Civil War period, or ships that were torpedoed during World War II. The Civil War famous shipwreck, *Monitor*, was located during this survey.

The late Mr. Ferris LaVerne Coffman spent many years collecting information on treasures and shipwreck sites. He compiled the results of his research on modern, nautical chart bases. In 1957 he produced an *Atlas of Treasure Maps* which was published by Thomas Nelson and Sons.⁹ The author made this statement: "All in all, I have investigated some 42,000 locations all over the Western Hemisphere that are said to have treasure in one or another form. Of these I have been able to authenticate about 3,500, most of which are indicated in this atlas." Locations of these treasure sites are keyed to 41 atlas pages.

Mr. Thomas P. Terry has compiled a modern *United States Treasure Map Atlas*.¹⁰ It consists of annotated maps representing the various 50 States and the District of Columbia. This 142-page atlas includes more than five thousand treasure sites keyed to the general location maps of the specific geographic area. The author makes the following statement: "Included are listings of special interest to those seekers of fortune from old mission sites to ghost towns; from buried pirate treasure to classic legends of famous lost mines."

The Library of Congress Geography and Map Division has found that the majority of the people who consult the treasure maps and atlases in the cartographic collections seem to have genuine aspirations to discover riches quickly. Treasure maps and atlases will, more than likely, continue to interest and fascinate the treasure buffs.¹¹ This continuing interest should encourage the future production of treasure maps and atlases by individuals and commercial map firms.

References

1. Wise, Donald A. *A description of treasure maps and charts in the Library of Congress*. Washington: U.S. Government Printing Office, 1973, 30 p.
2. Hacke, William. *A description of the sea coasts, rivers, &c. of Monomotops, Soffala, Mosambique ... as also of the islands of Japan ... and St. Lorinso alias Madagascar in the East Indies*. [1690?]. 94 fold. col. maps. 47 cm. Manuscript. (G2201.P5H2 1690Vault). [Phillips 3162].
3. Lynam, Edward. "William Hack and the South Sea Buccaneers." *The Mapmaker's Art: Essays on the History of Maps*. London: The Batchworth Press, 1953, 101-116.
4. La Guilbaudière, Jouhan de. *Description des principaux endroits de la mer du Sud depuis les 52 degrés 30 minutes sud, où est le d'estroit du Magelland jusqu'au 41 degré nord, qui est l'isle de Calliforne, faite sur les lieux par le s^r. Jouhan de la Guilbaudiere. Dressé et dessiné les plans qui l'accompagnent, sur ses mémoires par le sieur Hanicle, ingénieur ordinaire du roy*. [1696]. 35 col.maps (part fol.) 38 cm. Manuscript. (G1100.L3 1696Vault). [Phillips 1154].
5. Marcell, M. G. *Les fuégiens à la fin du XVII^e siècle d'après des documents Français inédits*. Paris: 1892.
6. Jefferys, Thomas. *The West-India atlas: or, A compendious description of the West-Indies: illustrated with 40 correct charts and maps, taken from actual surveys. Together with an historical account of the several countries and islands which compose that part of the world*. London: R. Sayer & J. Bennett, 1775. 39 maps. 57 cm. (G1600.J4 1775) [Phillips 2699].
7. Laurie, Robert and Whittle, James. *Laurie and Whittle's complete pilot for the West-Indies, including the British channel, Bay of Biscay, and all the Atlantic islands, done from actual surveys and observations of the most experienced navigators in his majesty's and the merchant's service. By the late Thomas Jefferys ... A new edition, corrected to*

- the present time.* London: R. Laurie & J. Whittle [1794] - 1805.
2 fold. maps, 26 maps. 65 cm.
(G1600.J 1805). [Phillips 3945].
8. Newton, John G. *An oceanographic atlas of the Carolina continental margin*, by J. G. Newton, O.H. Pilkey, & J. O. Blanton. Raleigh: North Carolina Department of Conservation and Development, 1971. 57 p. 44 x 74 cm. (G1301.C7N4 1971).
9. Coffman, Ferris La Verne. *Atlas of treasure maps.* New York: Thomas Nelson & Sons [1957]. 41 col.maps. 44 cm.
(G1101.E75C6 1957). [LeGear 10262].
10. Terry, Thomas P. *United States treasure map atlas.* [1st ed. La Crosse, Wis., Speciality Products, 1974]. 142 p. 51 maps. 28 cm.
(G1201.E7T4 1974).
11. Wise, Donald A. "Treasure Maps." *The Middle Atlantic.* College Park, Maryland: Journal of the Middle Atlantic Division of the Association of American Geographers, Vol. VI, No. 4, 1975, 47-60.



NEW MAPPING OF WESTERN NORTH AMERICA (Continued from p.17)

ARIZONA (continued)

- Pima Association of Governments. Transportation Planning Program. Street and highway network, system performance measures atlas. [Tucson, Arizona] PAGTPP, 1974.
- Pima Blueprint Company.
Map of Tucson, Arizona and vicinity, including South Tucson, Ajo, Green Valley, New Tucson, Summer Haven, University of Arizona. Tucson, Arizona [1973] Scale ca. 1:35,000.
- Tucson, Ariz. Dept. of Community Development. Planning Division.
Ward map City of Tucson, Arizona as amended April 1, 1975. [Tucson, Ariz., 1975] Scale 1:28,000.
- U. S. Bureau of Land Management.
"Land of contrast", Safford District, Arizona. Odgen, Utah, 1969.
Scale 1:500,000.
- U. S. Geological Survey.
Map of slopes and their environmental significance in the Marana quadrangle, Arizona. Washington, 1973. Scale 1:24,000. (U. S. Geological Survey. [Miscellaneous geologic investigations] Map I-846-A).

BENCH MARKS! (Continued from p.36)

CHERYL LOUISE COUMANS has been appointed Map Reference Librarian, Map Collection, University of Arizona Library, Tucson. Miss Coumans received her undergraduate degree in geography from the University of Arizona, and her master's degree in Library Science from the State University of New York at Albany.

SANDRA J. LAMPRECHT, Map Librarian, California State University, Long Beach, has been appointed by WAML President Mary Larsgaard to the WAML Publications Advisory Committee, to replace MARY SCHELL.

A review by

Mai Treude
Map Librarian
University of Minnesota
Minneapolis

THE GLOBE, Journal of the Australian Map Curators' Circle.
Editor: P.A.G. Alonso, 3 Macfarlane Street, South Yarra,
Victoria 3141, Australia. Subscription rate: individual Membership
\$1.00, institutional membership \$10.00, add \$1.00 for overseas post-
age; single issue \$.70. Available from: Mrs. Ann Turner, A.M.C.C.
Business Manager, Hargrave Library, Monash University, Wellington
Road, Clayton, Victoria 3168, Australia.

The *Globe*, number 1, August 1974, is a new journal in the map library pro-
fession. It incorporates the Newsletter and Proceedings of the AMCC and is
sent to all AMCC members. Information lacking in the first issue: frequency
of publication is not stated and there is no statement as to where it will be
indexed. Only in physical size is the format similar to the three well estab-
lished journals of map librarianship in the United States and Canada (SLA Geo-
graphy and Map Division Bulletin, WAML Information Bulletin and ACML Bulletin).
As promised on p. 12, its dissimilarities to these titles will be remedied by
future inclusions of newsnotes, map and book reviews, announcements, unsolic-
ited and commissioned articles, and proceedings of AMCC meetings. The lack of
these features accounts for the meager number of pages (14) in the first issue,
as compared to the 60-90 pages that make up the latest issues of the other
three journals.

As in the United States and Canada, the journal is an outgrowth of a need
for regular communication among members (p.12).

The table of contents lists seven main topics as they appear in this
issue:

1975 AMCC Seminar and Workshop
Map Exchange
Melbourne Seminar on Maps and Mapkeeping
Formation and First Meeting of the AMCC
Advantages of Co-operation between Map Producers and
Map Libraries
Map Collections, Map Curators and Mapkeeping
Union List of Topographic Map Series

Five of the features are communications of the Circle's activities, thus ful-
filling the immediate need and purpose of the journal.

The description of the AMCC Seminar indicates that the professional con-
cerns are the same on all continents: the education and role of the map cura-
tor, classification and cataloging problems, conservation, use, etc. The Cir-
cle is relatively new itself, having been formed in April, 1973. (The SLA
Geog. & Map Div. was formed in 1941, and the WAML & ACML in 1967). The forma-
tion of the AMCC is briefly described on pp. 5-7, along with a statement of
its objectives, which are remarkably use-oriented, rather than storage and
organization oriented. Somehow, the objectives appear as pleasant surprises,

which need to be shared; (a) To promote the development and effective exploitation of map collections throughout Australia; (b) To improve the skills and status of persons working with map collections; (c) To promote communication between producers, users and curators of maps.

"Advantages of Co-operation between Map Producers and Map Libraries" by Dorothy F. Prescott, is an article, in fact, on reference service. The article is highly recommended reading for its fresh and straight-forward ideas. It also emphasizes the reasons why map producers should deposit their products in libraries and how this can be to their advantage. The other article, "Map Collections, Map Curators and Mapkeeping" by Patricia A.G. Alonso, defines two types of map collections. One is called a working collection, as in a department or agency, for staff use; the other is called a reference collection, consisting of other related materials such as atlases and gazetteers, and exists for public use. Both papers are effective elaborations of the AMCC's objectives.

The journal, as a whole, is the main source of information on map librarianship in Australia. Much of the information is of temporary interest, due to its function as a communicator of news and announcements. It is somewhat early to make strong judgements about The Globe or to speculate on its future importance for the profession. Future issues should be watched for expansions and quality of articles. In the meanwhile, its appeal is for a limited audience. In this day of massive serials cancellations, new subscriptions must be carefully weighed. The Globe is not of top priority yet for library subscription. It is hoped that other journals will review future issues and print abstracts of contents thus enabling non-subscribers on the North American continent to follow the development of the journal. Single issues, or copies of important articles, may then be obtained. Keeping in mind their objectives, good ideas are bound to emerge from the AMCC.

EDITOR'S NOTE: The Globe has also received mention (but not evaluation) in the Bulletin of the Geography & Map Division, SLA, No. 98, Dec. 1974, p. 36.; and Bulletin No. 18 May 1975, p. 29, of the Association of Canadian Map Libraries.

THE AUSTRALIAN MAP CURATORS' CIRCLE has been added to the list of publication exchanges by a vote of the WAML Members attending the Vancouver meeting, based on the recommendation of the Executive Committee. The Globe and other AMCC publications will be reported in the Information Bulletin from time to time.]

PROCEEDINGS of the Australian Map Curators' Circle *SEMINAR and WORKSHOP* held at the Department of Geography, University of Sydney, 27-28 February 1974.

Editors: Alan Bartlett and Tom Knight. Canberra, National Library of Australia, 1975. ISBN 0 642 99033 6

From the Preface: This second meeting of the Australian Map Curators' Circle was a stimulating and informative occasion. The number of participants increased to forty-five, from all parts of Australia, and including representatives of university geography departments and the larger State and Federal map producers as well as map librarians and cartographers.

Chairmanship of the Circle will henceforth be vested permanently in the position of Map Curator at the National Library of Australia, the present incumbent being Mr. Tom Knight. It was decided that a vice chairman was needed

and Mrs. D. F. Prescott was elected [Map Librarian at the Baillieu Library, University of Melbourne].

TABLE OF CONTENTS:

1. Our world one world, Tom Knight
 2. The map library as an aid to the research geographer, Philip Tilley
 3. Map production, Alan Bartlett
 4. The map collections of the Library of New South Wales, Consett Davis
 5. Map preservation, David Newell
 6. Education for map librarianship and cartography in Australia, Patricia Alonso
 7. Some suggestions for a basic Australian reference collection in the map room, Dorothy Prescott
 8. Remote sensor data and the map library, Ellis Thorpe
 9. Air photos and the map curator, John Missen
 10. Distribution of maps and catalogues by State map producers, P. Alonso
 11. A union list of topographic map series in Australian map collections, Dorothy Prescott
 12. Lands Department map production program, and policy, Brian Hooker
 13. Settlement expansion in colonial New South Wales, Max Foale
 14. Historical map keeping, Robert Spreadborough
 15. Map production by the CSIRO, Margaret Mills
 16. The map and plan records of the Registrar-General's Department, and the application of microfilm for the filing of reference material, J. T. Cronan
 17. The orthophoto map, Ken Kendall
 18. Hierarchical structure of professional and educational relationships in cartography, M. Balodis
 19. Report of the Boggs and Lewis Subcommittee, Dorothy Prescott, Convenor
 20. In conclusion, Alan Bartlett
- Appendix 1: List of Participants

GEOSCIENCE INFORMATION, Proceedings of the Ninth Annual Meeting of the Geoscience Information Society, November 18, 1974, Miami Beach, Florida. Proceedings Volume 5. For sale by the GIS Secretary, c/o American Geological Institute, 5205 Leesburg Pike, Falls Church, Virginia 22041 - \$10.00. Orders must be prepaid. Please make checks payable to Geoscience Information Society.

CONTENTS: Uses of CRIB -- A GIPSY Formatted Mineral Resources Data File, James A. Calkins and Linda E. Deiter
 U.S. Geological Survey State Hydrologic Unit Maps, Paul R. Seaber,
 F. Paul Kapinos and John A. Shanton
 Information Retrieval Program for the Water Resources Scientific Information Center, Raymond Jensen
 OASIS, A "One-Stop" Information Service, James R. Stear
 LUNAR Data and Where It's At, Jody H. Heiker and Frances B. Waranius
 Use of Interactive Computer Graphics for Oil and Gas Exploration, Willis H. Alderman
 U. S. Department of the Interior - Energy Data Files, Richard F. Meyer

ASSOCIATION OF CANADIAN MAP LIBRARIES:
 Report Presented at the Joint Meeting
 With the Western Association of Map Libraries
 May 8 - 10, 1975 Vancouver, B. C.



by



Frances Woodward
 Past President, A.C.M.L.

The Association of Canadian Map Libraries was formed in Ottawa in 1967, when a meeting was called of people working with, or interested in, maps, to discover common problems and to find some solutions. Those attending the founding meeting were enthusiastic, and the Association of Canadian Map Libraries was born. The aims are: to promote interest and knowledge of maps and related material; to further the professional knowledge of its members; to encourage high standards in every phase of the organization, administration, and development of map collections by: providing for discussion of mutual problems and interests through meetings and/or publications; exchanging information on experiences, ideas and methods; establishing and improving standards of professional service in this field.

Since 1967 a Conference has been held every year, in a different part of Canada each year, and in the last few years they have expanded from three to five days duration. Proceedings are published after every Conference, a Newsletter was begun, and it has now developed into a Bulletin appearing three times a year.

One of the first projects was a National Union Catalogue of Maps, which has involved the National Map Collection and the ACML Committee in the development of new standard rules for cataloguing maps, and a Canadian MARC format for maps. The Committee has maintained close contact with those working on the Anglo-American Cataloguing Code Revision Committee, the ISBD [International Standard Bibliographic Description] for maps, and the Library of Congress MARC Maps. Work has progressed steadily, with the descriptive rule for monograph maps in its second draft, and hope for a pilot run in the next year. There is a possibility that the Anglo-American Revision Committee and the Library of Congress may adopt these rules.

Another project was a Directory of Map Collections in Canada. The first edition was published in 1969, and has been out-of-print for the last few years. A second edition, double the size, with indexes for personal names, areas, subjects, special cartographic collections and depositories, should be available by the end of the summer. This edition is being computerized, which will make future editions less costly and time consuming.

A third project, a manual for map collections, was begun with various people drafting chapters on topics such as acquisition, equipment, conservation, etc. A few chapters were published in the Newsletter for comment and discussion. It was found that this was not a very successful method, and with the appearance of the Drexel Library Quarterly issue on "Map Librarianship" (v. 9, no. 4, October 1973) the project was discontinued.

A number of other projects have been carried on over the years. At present we have about 15 committees, including temporary and standing. The Layout Committee, chaired by Serge Sauer, of the University of Western Ontario, will

shortly be publishing a Portfolio of Plans of Map Libraries. The Bibliography Committee, under Joan Winearls of the University of Toronto, is drafting a guide for the citation of maps in bibliographies and footnotes, which we hope to publicize as widely as possible. The Conservation Committee, under Betty Kidd of the National Map Collection, is looking into materials and equipment for conservation, and hopes to experiment with a centralized ordering of acid free map folders, enabling participants to purchase the material at cheaper rates through bulk ordering. A new committee is Copyright, under Pierre Lepine of the Bibliotheque Nationale du Quebec, which will look into present laws and practices as they apply to maps, and perhaps develop some guidelines for map collections, and practical suggestions for producers and legislators.

The Association of Canadian Map Libraries is co-operating with the National Microfilm Association on a microfilm standards committee, and with the Special Libraries Association's Geography and Map Division on map library standards.

The Association of Canadian Map Libraries is a full member of the International Federation of Library Associations, and sends a member to meetings. The official delegate is Hugo Stibbe, Registrar of Canadian Map Resources, National Map Collection.

The Canadian Institute of Surveyors, Cartography Committee, is to be dissolved in June with the formation of a new National Commission for Cartography, which will be a federation of organizations in Canada interested in maps and cartography. The Association of Canadian Map Libraries has been invited to participate, and will be represented by the in-coming President, Barbara Farrell of Carleton University.

The Archives Section of the Canadian Historical Association is preparing a Finding Aids Manual, to be edited by Patricia Kennedy of the Public Archives of Canada. Members of the Association of Canadian Map Libraries will be contributing to the cartographic archives chapter.

The Association of Canadian Map Libraries continues to grow, both in membership and activities. With major projects well-in-hand, and others just beginning, we look forward to another year, and will continue to participate and co-operate in every aspect of the map world.

This year we will be holding our 9th Annual Conference on the east coast, at Mount Allison University in Sackville, New Brunswick, June 15-20, 1975. We look forward to our first conference in the Maritimes, and hope that some of you may attend.

WANTED: Map Librarian Position

Evelyn Woodruff, WAML Member, is seeking a map librarian position at a library in the Western United States or Canada.

She has had five years of non-professional experience at the UCLA Map Library and recently received her MLS degree. Currently she is employed as a full-time reference librarian at the San Mateo Public Library working under a federal training grant. Write: 729 E. 4th Ave., San Mateo, CA 94401.

[Mrs. Woodruff is co-editor of the "Union List of Sanborn Maps in the United States and Canada", to be published by WAML as Occasional Paper #2.]

Association of Canadian Map Libraries.

University Map Libraries in Canada; a folio of selected plans. Edited by Serge A. Sauer, Map Curator, Department of Geography, University of Western Ontario. Published in co-operation with The Department of Geography, University of Western Ontario, London, Canada. 1975. \$7.50 Order from: A.C.M.L, c/o National Map Collection, 395 Wellington Street, Ottawa, Ont. K1A 0N3

CONTENTS:	Introduction, Serge A. Sauer
	Plate 1: Carleton University
	Plate 2: McGill University
	Plate 3: McMaster University
	Plate 4: Université Laval
	Plate 5: University of British Columbia
	Plate 6: University of Ottawa
	Plate 7: University of Toronto
	Plate 8: University of Western Ontario

FLOOR PLANS

From Mr. Sauer's Introduction: *Since the formation of the Association of Canadian Map Libraries (1967), the subject of planning map libraries has been one of the major topics for reports, panel presentations and informal discussions.*

University map libraries are recent developments in Canada. For example, all university map collections in Ontario have been created since 1964. The process of improving the existing facilities or planning new libraries is far from being completed. It has been evident, however, that the special requirements of the map library are not considered adequately by architects and professional library planners. Having established the need for some graphic illustrations to depict contemporary library layouts, as well as to demonstrate some obvious deficiencies and shortcomings, the Association of Canadian Map Libraries decided to produce a folio of map library plans. As the result of that decision, the Association can offer to the university administrators, librarians, and architects an initial set of plans.

The drawings produced show a variety of typical facilities which range from converted corridors and sections of general library space to modern units, constructed and designed as specialized areas for the storage and use of maps.

While inspecting these plans, a viewer may make a number of conclusions regarding the possible variations in arranging the equipment and furniture; desirable spacing of map cabinets and other basic components of a map library; space allocations to map-storage, reading areas, offices and workrooms; and an approximate ratio between contents of a collection and general space allotments.

This information is provided for every library as a conceptualized model ("schematic layout of functions"), in the form of a detailed plan, and supplemented by essential organizational and statistical data.

In order to make the information of this project immediately available, the number of plans was limited to eight. It is hoped that a second edition will include the plans of other university facilities in addition to plans of governmental and private collections, thus providing a broader and more complete graphic survey of Canadian map libraries.

Each Plate, 43 x 56 cm. folded to 43 x 28 cm., contains the following general information: Address of the Map Library; Operated By; Librarian in Charge; Staff; Library Founded [year]; Holdings; Facilities Provided; Total Floor Area; and Hours of Operation. The schematic layout is accompanied by a bar-graph to indicate scale. Each plate is lithographed in black ink [with shades of grey].

ASSOCIATION OF CANADIAN MAP LIBRARIES

Executive and Committees 1975-6

<u>Position</u>	<u>Name</u>	<u>Affiliation</u>
President	Barbara Farrell	Carleton University, Ottawa, Ontario
Vice-Pres.	Richard Malinski	Simon Fraser University, Burnaby, B.C.
Past-Pres.	Frances Woodward	Univ. British Columbia, Vancouver, B.C.
Secretary	Tom Nagy	Public Archives of Canada, Ottawa, Ontario
Treasurer	Lorraine Dubreuil	McGill University, Montreal, Quebec

Committee

Archives	Jim Knight	Public Archives of Canada, Ottawa, Ontario
Awards	Lorne Leafloor	Dept. of Energy, Mines, Res., Ottawa, Ont.
Bibliography	Joan Winearls	University of Toronto, Toronto, Ontario
<u>Bulletin</u>	Richard Malinski	Simon Fraser University, Burnaby, B.C.
Conference 76	Serge Sauer	University of West. Ontario, London, Ont.
*Conservation	Betty Kidd	Public Archives of Canada, Ottawa, Ontario
Constitution	Frances Woodward	Univ. British Columbia, Vancouver, B.C.
*Copyright	Pierre Lepine	Bibliothèque Nationale du Québec, Montréal
*Membership	Lorraine Dubreuil	McGill University, Montreal, Quebec
*National Union		
Catalogue	Kate Donkin	McMaster University, Hamilton, Ontario
Nomination 76	Frances Woodward	Univ. British Columbia, Vancouver, B.C.
*Publications	Richard Malinski	Simon Fraser University, Burnaby, B.C.
Proceedings	Tom Nagy	Public Archives of Canada, Ottawa, Ontario
Directory	Ralph Daehn	University of Guelph, Guelph, Ontario
Layout	Serge Sauer	University of Western Ont., London, Ont.
Handbook	Lou Sebert	Dept. of Energy, Mines, Res., Ottawa, Ont.
(for Small Map Collections)		
Distribution	Heather Maddick	Public Archives of Canada, Ottawa, Ontario

*Indicates Standing Committee

PROCEEDINGS of the Eighth Annual Conference, Association of Canadian Map Librarians, June 9 - 13, 1974, Toronto, Ontario. ISSN 0066-9474 \$5.00 96p. 23cm.
Order from: Publications Committee, ACML, c/o National Map Collection,
Public Archives of Canada, Ottawa, Ontario K1A 0N3 *Issued: May 1975*

Table of Contents:

Reference services in an archival map collection, Edward H. Dahl
Reference work in a current map collection, Joan Winearls
The use of the Universal Decimal Classification in map indexing, Malcolm Rigby
Notes on the preservation and conservation of maps, Jan Pidek
Chas. E. Goad and fire insurance cartography, Robert J. Hayward
Formation of the ICA Working Group on the History of Cartography, H.W. Castner
Report on the National Topographic Mapping Program, Lou M. Sebert
Minutes of the eighth annual business meeting
A.C.M.L. publications
List of delegates
Information about the A.C.M.L.

Maps and the Teaching of Urban Geography in British Columbia*

by



L. J. Evenden

Department of Geography
Simon Fraser University



Introduction

To address this topic, on which I have agreed to speak, it is necessary to recognize a tri-partite problem which arises at the outset. The first part requires some understanding of the nature of maps and cartography, the second part refers to the apparently separate foci of teaching and the nature of urban geography, while the last implies a confinement of remarks to the Province of British Columbia. Like the three-cornered hat, however, the apparent directions of these thrusts should not be viewed as indicating separate existences. Rather, they refer to points which interweave a unified existence from wide-ranging complementarities. In the remarks which follow it will be necessary to divide the discussion according to these three points, but the intention is that these parts should cohere in a unified presentation.

What is it that we call urban?

Perhaps the best we can do at the moment is to provide a working definition of the word "urban" to suit our present purposes. There are so many definitions available, all of them adequate in some measure, that I must select only two approaches for discussion. The first because it is so commonly used and assumed to constitute the one true definition, the second because in my view it serves better to define the nature of the urban phenomenon.

The demographic approach to the urban definition lies behind the work of the Census, both in Canada and elsewhere, and commonly asserts that there should be a minimum population and population density in a place, in contrast to surrounding less populated areas, for an urban agglomeration to be identified. Thus Canada recognizes places having populations of 1,000 or greater to be urban, the United States requires 2,500 persons, while in Sweden and Denmark only 200 persons will suffice. Breese, however, in studying world-wide conditions and examples, must use as high a figure as 20,000 persons if he is not to distort unduly the comparisons among places.¹ With such widely varied criteria, to say nothing of associated complexes of criteria referring to legal and administrative definitions, one may well question the demographic approach as to its validity.

Perhaps one of the most straightforward assertions in support of this approach came, some years ago, from H.T. Eldridge in "The Process of Urbanization."²

* Remarks before a combined meeting of the Association of Canadian Map Libraries and the Western Association of Map Libraries at the University of British Columbia, May 9, 1975. (These remarks were illustrated by numerous maps during the presentation.)

1. Breese, G., Urbanization in Newly Developing Countries, Englewood Cliffs, Prentice-Hall, 1966, 151 pp.
2. Eldredge, H.T., "The Process of Urbanization", Social Forces, Vol. 20, 1942, see p. 338.

Urbanization is a process of population concentration. It proceeds in two ways: the multiplication of points of concentration and the increase in size of individual concentrations . . .

The restriction of the definition of urbanization to terms of population concentration may at first seem too limited, but an investigation of the possibilities of broader or different definition will show that this is the only one which does not lead to ambiguity and other forms of intellectual distress. Its concreteness and simplicity further recommend it; it gives us something definite to lay hold of. Logically and etymologically, it is unassailable. The societal point of view demands it, since it comprehends the totality of the process both in time and in space. It eliminates or throws into different categories other processes which, though associated with urbanization, may have opposing effects upon it. The concomitants of urbanization are not to be ignored; they are simply to be distinguished from it.

Consistent with the definition of urbanization, cities may be defined as points of concentration.

One may speculate that the strident tone of Eldredge's assertion came in reaction to Wirth's definition of "Urbanism as a Way of Life", which had been published only four years previously, and which had received much attention.³ Be that as it may, the demographic definition provides for an easily handled mass of statistical data which is amenable to map presentation, and therefore is widely used in discussions in urban geography. Other approaches are generally less well represented, but more attention needs to focus in other directions because of the incomplete results which have attended efforts to deduce, via versions of the gravity and other models, conditions of the urban scene. The relative weighting of populations according to their numerical presence cannot provide a set of inferences which will adequately frame the study of urban society, whether through the approach of urban geography or through any other approach.

Let us turn to a second approach which focuses upon the central position of the city within a wider society. In this I follow John Friedman in emphasizing the geographical as well as social properties implicit in such a focus.⁴ Friedman insists that cities be regarded holistically in order to allow the common denominator, presumably the essential quality of urbanism, to emerge. Thus the city is a way of life: it is socially heterogeneous and displays cultural vitality: nationality is the hallmark of its existence. These characteristics collectively imply the emergence of agreed ends and means, the social effects being the creation of a civic political consciousness and the emergence of decision-making elites whose opinions carry authority. But decisions are

3. Wirth, L., "Urbanism as a Way of Life", American Journal of Sociology, Vol. 44, 1938, pp. 3-24.

4. Friedman, J., "Cities in Social Transformation", Comparative Studies in History and Society, Vol. 4, 1961-62, pp. 86-103.

made about matters of substance, most fundamentally the means to sustain life. Thus water supply, an assured food supply, the provision of fibres and metals, all constitute areas of decision-making authority. The urban place necessarily, therefore, will influence surrounding space and will, by this influence, restructure this space as part of the means to suit its agreed ends. Part of its own social heterogeneity and cultural vitality is implied in this restructuring inasmuch as different persons and peoples will orient their activities in reaction to this process, and will be caught up in the life of the city either directly or indirectly at a distance. Thus the city is a crossroads, at once geographical and social, and it is this spatial association that may be regarded as its most fundamental property or common denominator. In the urban definition, rationality and organized space are integral complements. For our purposes, to-day, let us therefore follow Friedman in defining the city or urban place as the centre for the creation of effective space.

What is a map?

Surprisingly few authors, even in cartography textbooks, grasp the nettle of defining the map. To judge from the discussions of map properties which one reads, there seems to be a general assumption that the map is a well-known and understood document, an assumption which I feel may not be made. However, we must be content to-day with a general and brief discussion and definition of the map.

A map is a notation. But what may be understood by this? A list is also a notation but in a list the order of phenomena is purely sequential. Even the sequential ordering may be diminished in its significance if a disclaimer to this effect is made. This reduces the list merely to an inventory with no necessary beginning or end. But the map, as notation, is also an inventory and requires no particular starting or finishing point. Nevertheless, in the case of the map it is impossible to claim that the phenomena shown have no relational significance within the map. These phenomena are ordered geographically (or merely spatially) by the very act of entering them into the map notation. Their further ordering may be manipulated by attention to the technical details of proportionate scale and symbol creation and use. Thus we may define the map as a notation which is an inventory of selected phenomena expressed through defined symbols manipulating scale, line, dot, shape, direction, colour and light reflective properties, and which imposes geographical order on phenomena, an order integral to the act of mapping.

Implications of the definitions of urban and map

What the map has to offer is a way of ordering environmental, that is geographical, phenomena, into a comprehensible symbolic display. Clearly this is a communication quite different from the sequential arrangements of the written and spoken word. The map implies the collection and assembly of information to the draughting table and the mapping process is thus itself a centralizing endeavour. When geographical information is portrayed in the map it further implies the possibility of seeing the order of the wider environment. Thus mapping activity and urban development in space are parallel in process and complementary in the effect of imposing order on environmental phenomena.⁵

5. This question is addressed from a somewhat different standpoint by the philosopher Stephen Toulmin in his example of the relation between the map and the set of geographical statements which may be read from it. The Philosophy of Science, London, Hutchinson, 1953. See Chap. 4, "Theories and Maps".

There are opposed modern planning/ecological arguments which depend on the recognition of this complementarity. The first argument asserts that, in an era of potential ecological collapse on a global scale, only in the "metropolis" can the environment be symbolized, analyzed and understood to a sufficient degree to permit its management for ecological survival. The counter-argument asserts that this centralization process is too vast an undertaking ever to be successful in its management implications, and that it may require the loss of certain freedoms which should not be forfeit. Thus there should be a reduction in the scale of management to smaller ecological complexes and the total system would therefore contain within it sufficient room and flexibility to absorb errors made from time to time in certain of the smaller units. These opposed approaches depend upon judgements that the "metropolis", that ultimate centre of environmental control, the aggrandized urban place, is either a good and progressive development or a disaster of increasing proportions with every step in its growth. In either case the argument depends upon a perception that there is a patterned centralization of information, what has sometimes been referred to as the "map mentality".

The last implication I wish to draw here is that it is clearly impossible for me to suggest, or to pretend, that the subject matter of urban geography can be confined to one Province, or even one country. The growth of economic and political organizations, centred in cities, has clearly reached the point that there are virtually "placeless" metropolitan controls which exert varying influences throughout the world. What is possible at the local scale is an attempt to see the local urban developments as expressions of social movements, some within local competence to handle and some well beyond. To understand one's place in the urban world is thus an aim in my teaching of urban geography, and I am sure it is an aim of other instructors in the subject as well. It is always necessary to develop the theme that any urban place is part of a wide-spread urbanism whose characteristics and patterns of development emerge as reactions to those urban-based controls, centred in various cities and from which emanate specific urban demands. To recognize this theme as also to recognize that the organization of wider environments of "countryside" and "wilderness" are essentially aspects of the urban dynamic.⁶

Who studies urban geography in British Columbia and how is the subject approached?

The students of the subject whom I have come to know are those of my own university, of the University of British Columbia, and of various regional colleges where I have instructed on a visiting basis. My impression is that most students tend to focus their urban interests automatically on B.C. and for an example of a large city, upon Vancouver and its surrounding area. Those who come from the Interior sometimes are very excited and stimulated by the "big city" and are eager to find out all there is to know about it. They are often stimulating to teach although they are sometimes naive because a small town background has failed to provide that body of "instinctive" knowledge about the larger urban centre. Another group, from beyond B.C., are also very curious about the city and find in it certain fascinations because of its unique ex-

6. For a stimulating discussion of this point see Tuan, Yi-Fu, Man and Nature, Association of American Geographers, Commission on College Geography, Resource Paper No. 10, 1971, 49 pp.

56pressions of urban processes with which they are already familiar and about which they have opinions already formed. A third group, those who have been raised in the Vancouver area, divide into those who find in their studies an awakened interest in their own surroundings and background, and those who simply "know" that Vancouver is the "centre of the world" and regard any new development as a logical progression dependent upon the truth of this fact. These three groups in themselves represent a very select sample, for in some degree the whole population studies urban geography every day in its conscious arrangement of its urban space and activity. But what all these groups hold in common is that they comprise urban people, that is people who are themselves inside and of the subject of their own study. Their study of urban geography is therefore the study of themselves. The initial tendency is to study themselves directly in their own surroundings, but it is often possible to create an interest in the study of urban areas around the world, perhaps on a comparative basis, and to try to forge the knowledge that the two approaches are complementary. The study of urban origins and evolutions must also form an integral part of this. To this end I teach a senior under-graduate seminar in comparative urban regions, and other courses, dealing with systematic approaches in geographical enquiry, directly feed as pre-requisites into this seminar. Both the Universities of British Columbia and Victoria have full complements of courses in urban geography and it is a subject which has been opening up rapidly in the new regional community colleges of the Province.

The place of maps in this instruction falls into two basic areas. The first involves the availability of published maps. Different arrangements exist in different institutions but, at Simon Fraser University, all map holdings are centralized in the library. The library has, since the founding of the university taken a particular interest in its map collection, and at the present time a full-time librarian, trained also as a geographer and cartographer, devotes himself to geography and map holdings. The second area of map use is in the assignment of students to the creation of original maps as documents in their study of urban geography. This may involve field work of all kinds, the compilation of data from published sources including other maps, and the rendering of all this into mappable form. Thus the "map mentality" come about, and one is enlarged from the unenviable position of being the "ant on the carpet", as the cartographer Raisz has remarked, to being one with a perspective of the whole pattern all at once.

Conclusion

The conclusions to these remarks are inherent in them. The urban process implies centralization. The mapping process too collects and centralizes data. Both result in patterns of arrangement, the one of the environment itself, the other in symbolic terms. The map is a notation and document of geography, one which imposes order by arrangement and spatial association and hence may be conceived as a tool in understanding the environment. It is apparently a central focus of thought upon which value judgements are made concerning the management of our territories. As this is the case, it suggests the need to preserve the integrity of the map such that its symbols are developed and handled as accurately as possible. Equally, it imposes the obligation not to use the calculated distortions, for example of map projections, to construe deliberate misrepresentations of phenomena under the guise of apparent accuracy. All of this is necessary to the study of urban areas, whether on a local or international scale; and in considering a published map or in creating a new one, it is necessary that the student come to know that the environments so symbolized result from various interactions and influences with urban-centred demands and controls.

Acknowledgements

Mr. D. Nicol, Geography Department, Douglas College, New Westminster, B.C.

Miss E. Peerless, Geography Department, Douglas College, New Westminster.

Mr. A. McVey, Geography Department, College of New Caledonia, Prince George, B.C.

Mr. C. Murray, Environmental teaching programme, School Board, Kamloops, B.C.

My own students, particularly those of the "Urban Regions" seminar at Simon Fraser University, Geography Department, and those of the Geography of Urbanization course at the University of British Columbia whom it was my pleasure to instruct during the Autumn, '72.

Mr. D. Douglas, Department of Geography & Regional Planning, University of Ottawa.

GUIDE TO U.S. GOVERNMENT MAPS

The long-awaited *Guide to U.S. Government Maps*, published by Documents Index of McLean, Virginia, has been received. The first two items to appear are ... *Volume 1: Geologic* ... , and the *Location Index* [which is being issued as a bonus volume for subscribers to the *Guide to U.S. Government Maps*].

Map librarians will welcome these cartobibliographies. Entries in this *Geologic and Hydrologic Maps* volume were taken from the cumulative volumes of the U.S. Geological Survey's *Publications of the Geological Survey, 1879-1961*, and, *1962-1970*, the annual supplements for 1971 thru 1973, and the monthly lists of *New Publications of the Geological Survey* for 1962 through 1974. Anyone who has labored through these lists will save valuable time, and frustration, by using this new work. Eleven map series, plus monographic special maps, have been included. Three indexes are provided: Area, Subject, and Coordinate.

The *Location Index* is a reprint of material provided in the U.S.G.S. *National Atlas of the United States of America*. It is, therefore, primarily a gazetteer of place names of the U.S., which is a convenient format - handy for those map collections which can't have the *National Atlas* present because it is part of the Atlas or General Reference collection, often located elsewhere. Included herein [pp. 297ff.] are "Coordinate Tables" for those entries in the index which do not contain coordinates. This will facilitate searches for map coverage in an area 1° x 1° for the entire U.S., when used in conjunction with *Geologic and Hydrologic Maps* and all forthcoming volumes in this *Guide to*

Other volumes will include: Topographical Maps; Navigational Maps; Miscellaneous Maps (all maps not falling in other categories); Aerial Photographs; Atlases, Bibliographies, Reference Works.

Orders must be placed directly with Documents Index, Box 195, McLean, VA 22101. Publication price for *Geologic and Hydrological Maps* is \$50 (\$45 for cash orders).

Contributors: AB = Anna Blustein - University of California, Los Angeles
 EP = The Editor, via Publisher, or item in hand
 NK = Nancy M. Kline, Map Librarian, Univ. of Connecticut
 MG = Mary Galneder, Map Librarian, Univ. of Wisconsin-Madison
 JS = John Schroeder, Head, Map Section, USGS, Reston, VA.

AUSTIN, CHRISTINE

Festivals in California : a guide to unusual events in the Golden State /
 AB by Christine Austin ; illustrated by Don Irwin. -- San Francisco :
 101 Productions, 1971. 95 p. : ill. ; 21 x 11 cm.

BARWIS, JOHN H.

Catalog of Tidal Inlet Aerial Photography. U.S. Army Corps of Engineers,
 Coastal Engineering Research Center, Fort Belvoir, VA., 1975. General
 Investigation of Tidal Inlets, Report 75-2. 166 p. 27 cm.

EP Data on approximately 6000 aerial photographic coverages of tidal inlets
 are presented in tabular form, along with information on how any given
 photograph may be obtained. The compilation covers inlets along the At-
 lantic, Gulf, and Pacific coasts of the contiguous U.S. coastline from
 1938 to 1974, and includes 1.) Inlet name, 2.) Geographic coordinates,
 3.) National Ocean Survey navigation chart covering inlet, 4.) Georef
 grid square, 5.) Month and year of photography, 6.) Federal, state, or
 commercial agency holding film, 7.) Project number, 8.) Pertinent expos-
 ure numbers, 9.) Scale, 10.) Film type. Information is also given on
 sources of additional photography, and on obtaining photography of beach
 areas between any two inlets. An index, by Corps of Engineer District, is
 given.

CALIFORNIA. OFFICE OF PLANNING AND RESEARCH. STATE PLANNING SECTION.

Maps and publications for areas of potential environmental critical con-
 cern. Sacramento, Governor's Office, Office of Planning and Research,
 1974. viii, 58 p. 28 cm.

EP Entries are organized as follows: I. Main Category, Subcategory; II. the
 Source; III. Data available [i.e., Publications, Maps, etc.]; IV. Contact;
 V. Remarks. The Data Available section regarding maps indicates: title,
 scale, form [reproducible, etc.], availability [i.e., must be copied in
 office, etc.], and location.

CANADA. PUBLIC ARCHIVES OF CANADA. NATIONAL MAP COLLECTION.

Winnipeg in Maps; 1816-1972. Ottawa, National Map Collection, 1975.
 By Alan F. J. Artibise and Edward H. Dahl.

EP The authors, historian Alan Artibise and Edward Dahl, an archivist with
 the National Map Collection, selected 31 maps of Winnipeg to depict the
 evolution of the city from a small trading post to the largest city on
 the prairies. Most of the maps are from the National Map Collection and
 a number from the Public Archives of Manitoba. Accompanying the maps is
 a 15,000 word text. This 80-page, slick litho volume costs \$2.50 and is
 for sale at Information Canada bookstores. \$3.00 other countries. Cata-
 logue No. SA2-77/1974. Available by mail from Information Canada, Ottawa
 K1A 0S9.

CHINA, A GEOGRAPHICAL SKETCH. -- Peking : Foreign Languages Press, 1974.
 [v], 130 p. : ill., fold. map ; 19 cm.
 Based on "Geography of China", published in 1972. "Most of the articles
 are taken from the magazine China Reconstructs, though some have been
 AB newly translated or revised."

CHUNG-KUO KUO CHI LÜ HSING SHE.
 Tourist guide to China / edited by China International Travel Service
 and Foreign Languages Press. -- Peking : Foreign Languages Press, 1974.
 AB 194 p. : chiefly ill. (some col.), fold. col. map ; 26 cm.

COLCORD, J E
 Remote sensing and photo interpretation / J. E. Colcord. -- Seattle :
 University of Washington, 1972.
 i, 37 p. : ill. -- (United States. Geological Survey. USGS-DO-73-003).
 "Prepared for Geological Survey". Pages 34-37 are repeated at the back
 AB of the report. "Interagency report USGS-255".

COMMISSION OF THE EUROPEAN COMMUNITIES. Directorate General of Information.
 The European Community in Maps. [as reported in WAML Information Bulletin
 Vol. 6, #3, p. 33 (June 1975)]

NK This publication can be obtained without charge by writing to:
 European Community Information Service
 Suite 707
 2100 M Street, NW or 277 Park Avenue
 Washington, DC 20037 New York, NY 10017

COMMISSION FOR THE GEOLOGICAL MAP OF THE WORLD. Subcommission for the Metal-
 logenic Map of the World. Drafting Committee on the Metallogenic Map of
 Europe.

Carte métallogénique de l'Europe / Préparée par le Comité de rédaction
 de la carte métallogénique de l'Europe; coordonnateur général Pierre
 Laffitte. -- [Paris] : le Bureau de recherches géologiques et minières
 et l'Organisation des nations unies pour l'éducation, la science et la
 culture, 1970-

col. maps on sheets 68 x 96 cm. fold. to 27 x 22 cm. 1:2,500,000
 AB At head of title: Patronnée par Union internationale des sciences géo-
 logiques et Congrès géologique international, Commission de la carte
 géologique du monde, Sous-commission de la carte métallogénique.
 With each sheet is issued a booklet, "Liste des gites minéraux" (27 x 21
 cm.). Each fold. map is laid inside its corresponding list of mineral
 deposits.
 CONTENTS: Feuille 1. Europe N-O (i.e. NW). -- Feuille 2. Europe N (i.e.
 N (Stockholm)). -- Feuille 3. Europe N-E (i.e. N-W (PERM)). -- Feuille
 4. Europe O (i.e. W). -- Feuille 6. Europe E (i.e. E (Moscou)).
 Available from: UNESCO Publications Center, Division of UNIPUB, Inc.,
 P.O. Box 433, New York, NY 10016. \$158. subscription price, entire set.
 Nine sheets will complete set.

CUMMING, WILLIAM PATTERSON, 1900-
 British maps of colonial America / William P. Cumming. -- Chicago :
 University of Chicago Press, 1974.
 AB xii, 114 p. : maps. -- (The Kenneth Nebenzahl Jr., lectures in the
 history of cartography at the Newberry Library). Maps are facsimiles.
 Includes bibliographies. 1. United States - History - Colonial period,
 ca. 1600-1775. 2. ... Revolution, 1775-1783. 3. ... 1755-1763.

DAHL, EDWARD H., HELENE ESPESSET, MARC LAFRANCE, THIERY RUDELL.

La Ville de Quebec, 1800-1850: un inventaire de cartes et plans.
Ottawa, National Museums of Canada, 1975. National Museum of Man,
Mercury Series. History Division, Paper No. 13.

ISSN 0316-1854/ISSN 0316-1900 423 p., 72 maps. \$5.00 28 cm.

- EP The purpose of this work is to draw attention to the maps of the City of Quebec between 1800 and 1850 as an important source for studying the history of the city. Included within the book are: 1.) a calendar of 315 maps of Quebec City (1800-1850) held at the Public Archives of Canada, together with an index; 2.) a list of 388 maps held in different archival repositories at Quebec; 3.) an introduction, with illustrations, discussing the evolution of the city between 1800 and 1850; 4.) photographic reproductions of approximately 75 maps. Text is principally in French, although some entries are part English due to the original title, etc.

Available from the following address on receipt of a cheque made payable to the Receiver General of Canada. No discounts. Marketing Services Division, National Museums of Canada, 360 Lisgar Street, Ottawa, Ontario K1A 0M8

DERNAY, EUGENE, 1892-

Longitudes and latitudes in the United States / by Eugene Dernay. --
Washington : American Federation of Astrologers, [1974?]
v, 120 p. ; 29 cm.

- AB Reprint of the 1945 ed. published by the National Astrological Library, Washington, D.C.

DERNAY, EUGENE, 1892-

Longitudes and latitudes throughout the world / by Eugene Dernay. --
Washington : American Federation of Astrologers, [1974?]
x, 134 p. ; 29 cm.

Reprint of the 1948 ed. published by the National Astrological Library, Washington, D.C.

FALK, ANNE LUCAS and RALPH L. MILLER

Worldwide directory of national earth-science agencies. Compiled by
Reston, VA., U.S. Geological Survey, 1975. USGS Circular 716.

- iv, 32 p. 26 cm. A listing of governmental earth-science organizations whose functions are similar to those of the U.S. Geological Survey. Free on application to: Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.
- JS

GOODELL, H G

Environmental application of remote sensing methods to coastal zone land use and marine resource management, final report / by H. G. Goodell, C. M. Woolheater and K. L. Echternacht. -- Charlottesville, VA. : Dept. of Environmental Sciences, University of Virginia, 1972.

- AB iv, 132 p. : ill., maps. -- (United States Geological Survey. USGA-DO-73-005) "Prepared by the U.S. Geological Survey (USGS) for the National Aeronautics and Space Administration (NASA) ... Work performed by the University of Virginia for the USGS Geographic Applications Program..." "Interagency Report USGS-243". Bibliography: p. 128-132.

1. Remote sensing systems. 2. Coasts - Virginia. 3. Land utilization - Virginia. 4. Marine resources conservation - Virginia.

HALL, VIVIAN S.

Environmental Geology: a selected bibliography. Microform Publication 1. Boulder, CO., Geological Society of America, 1975.

EP A set of four microfiche enclosed in an envelope which bears an index to the set. This is the first document in the GSA's new microform series; the second will be Mineral Resources of China. This bibliography contains more than 4,200 references divided into eight categories: Resources, Geologic Hazards, Pollution, Environmental Impact, Urban Geology, Land Use Planning, Waste, and Water Resources. It includes an author index and two appendixes. The original 8½ x 11 copy of 328 typewritten pages is reduced to standard 98-frame fiche for use on 24x readers. Maps are included in the works indexed.

Publication Sales Department, The Geological Society of America, 3300 Penrose Place, Boulder, CO 80301. \$6.00

HORTON, FRANK E.

The application of remote sensing techniques to inter and intra urban analysis / by Frank E. Horton. -- Iowa City, Iowa : Institute of Urban and Regional Research, University of Iowa, 1972.

ix, 243 p. : ill., maps. -- (United States Geological Survey. USGS-DO-73-002) "Work performed by the University of Iowa for the USGS Geographic Applications Program ... and for the National Aeronautics and Space Administration ... " "Interagency report USGS-250". Bibliography p. 230-232.

KIDD, BETTY H.

Using maps in tracing your family history. Ottawa, Ottawa Branch, Ontario Genealogical Society, 1975?. Publication 74-14. 48 p. 28 cm. mimeo. illus.

EP Written by the Chief, National Map Collection of Canada, [also one of WAML's Associate Members], for the genealogist but may be interesting for the map librarian who handles genealogical enquiries. It is available for \$3.00 from the Society, P.O. Box 8346, Ottawa, Ontario, K1G 3H8, Canada.

KLOSS, HEINZ

Atlas of 19th and early 20th Century German-American Settlements. Marburg, Germany, N.G. Elwert Verlag, 1974. iv, 18 p. & 96 maps. 45 x 64 cm. Text in English and German. ISBN 3-7708-0503-8 DM190. Available from Otto Harrassowitz, Library Agency, P.O. Box 349, D-62 Wiesbaden.

LEE, MARGARET

A catalogue of maps held in the map library of the Department of Geography, University of Sydney ... / compiled by Margaret Lee under the direction of Alan Bartlett, cartographer. -- Sydney : Dept. of Geography, University of Sydney, 1973. [v], 115 p. Includes maps and atlases in the Dept. of Geography, and maps in the Dept. of Semitic Studies.

MEETING OF THE SOVIET-AMERICAN WORKING GROUP ON REMOTE SENSING OF THE NATURAL ENVIRONMENT FROM SPACE, 1973.

[Papers] / Meeting of the Soviet-American Working Group on Remote Sensing of the Natural Environment from Space, 12-17 February 1973. -- Arlington, Va. : Joint Publications Research Service, 1973.

AB a-b, 191 p. : ill., maps. -- (United States. Joint Publications Research Service. JPRS 59739). "Collection of Russian-language papers: IKI Institute of the USSR Academy of Sciences, 1973, Moscow." Includes bibliograph.

SCHELL, KERRY F.

Application of remote sensing techniques to measurement of use of outdoor recreation resources / by Kerry F. Schell and Joe H. Taft. -- Knoxville, Tenn. : University of Tennessee, 1972.

iii [i.e. iv], 110 p. : ill. -- (United States. Geological Survey. USGS-DO-73-004) "Prepared for the [United States] Bureau of Outdoor Recreation by the University of Tennessee ... " "Interagency Report USGS-256".

AB Bibliography: p. 61-70.

SKELTON, RALEIGH ASHLIN, 1906-1970.

Saxton's survey of England and Wales, with a facsimile of Saxton's wall-map of 1583 / R. A. Skelton. -- Amsterdam : Nico Israel, 1974.

26, [1] p., 20 leaves of plates : ill., maps ; 50 x 34 cm. -- (Imago Mundi : Supplement ; no. 6). Facsim. of the British Museum copy.

In 1937, "a second copy came to light, having the sheets mounted on canvas to form a wall map ... The British Museum map however displays the [20] sheets as they came from the printing press ... and it is accordingly selected for reproduction in the present publication." At head of cartouche on map: Britannia insularum in oceano maxima a Caio.

AB

Bibliography: p. 23. ISBN 90.6072.719.3

U.S. CENTRAL INTELLIGENCE AGENCY

USSR Agriculture Atlas. Washington, DC, U.S. Government Printing Office, December 1974. For sale by the Superintendent of Documents, Washington, DC 20402. \$4.20 Stock Number 041-015-00073-0

59 p. 37 x 25 cm. Includes sections on: environment, technology, the system, and production.

EP

GALNEDER, MARY, ELIZABETH SINGER MAULE, and NANCY JO PICKETT

A union list of topographic maps of Wisconsin. Madison, University of Wisconsin, Cartographic Laboratory, 1975. \$3.50

MG

The Union List includes topographic maps of the State of Wisconsin which are located in the map collections of the State Historical Society of Wisconsin and the Universities of Wisconsin at Madison and Eau Claire. The majority of the maps are standard topographic quadrangles produced by USGS although some maps by other Federal agencies and at other scales are included. Name, scale, latitude and longitude for the southeast corner, contour interval, dates (of survey, edition, reprinting, revision, or printing), descriptive notes, and location are given for each map: The list, which is reduced to 11" x 8½" from a computer print-out, is current as of May 1975; a supplement up-dates it to September 2, 1975.

The Union List was compiled by Mary Galneder, University of Wisconsin-Madison [WAML Associate Member], Elizabeth Singer Maule, State Historical Society of Wisconsin [I.B. subscriber], and Nancy Jo Pickett, University of Wisconsin-Eau Claire [I.B. subscriber].

Index maps showing in-print and out-of-print maps as of January 1975 are folded into the publication. Names and addresses for other libraries in the State which also receive depository shipments of these maps and for dealers which sell topographic maps are included.

The Union List of Topographic Maps of Wisconsin is No. 1 of an irregular series of papers to be published by the University of Wisconsin Cartographic Laboratory. Orders may be placed (with pre-payment to the U.W. Cartographic Laboratory) from:

Cartographic Laboratory
Science Hall, ATTN: Mary Galneder
University of Wisconsin
Madison, WI 53706

WOODRUFF, EVELYN LEIGH

A union list of New York Sanborn maps; a research paper presented to the Faculty of the Department of Librarianship, San Jose State University, in partial fulfillment of the requirements for the Degree, Master of Arts. San Jose, CA., July 1975.

EP vii, 110 f. 28 cm. "This research paper was done as a preliminary study to A Union List of Sanborn Maps of the United States and Canada presently being compiled by the author and R. Philip Hoehn". The latter is to be published by WAML as Occasional Paper No. 2.

NUHN, H., P. KRIEG, W. SCHLICK

Zentralamerika; Karten zur Bevölkerungs- und Wirtschaftsstruktur. With 57 tables, 13 figures and 10 folded maps. (Beiträge zur Geographischen Regionalforschung in Lateinamerika, Bd. 1. Herausgegeben von H. Nuhn, G. Sandner, H. O. Spielmann). Hamburg 1975. DM 60. Distributed by GEO CENTER, 7 Stuttgart 80, Postf. 8008830.

EP This publication presents a systematic survey of selected demographic cultural and economic aspects of the Central American countries: Panama, Costa Rica, Nicaragua, Honduras, El Salvador, Guatemala, and Belize. It contains ten maps, 62 x 84 cm. in size, scale 1:2,000,000, with German and Spanish legend and referring to the period 1970-1973. The maps are accompanied by explanatory texts which introduce the respective subject matter, cover problems of source material and cartographic presentation, and provide references for further study. The work corrects numerous errors found in the previous literature or on maps. It closes gaps of knowledge and offers information fundamental for the understanding of the Central American integration movement and its problems. Maps: Topography; Contours; Administrative divisions; population distribution, ethno-linguistic regions, land use, manufacturing, transportation, foreign trade, economy.

New Titles, BRIEFLY NOTED

by

Edward P. Thatcher
Map Librarian
Univ. of Oregon, Eugene

1. al Farugi, Isma'il & David E. Sopher. Historical Atlas of the Religions of the World. New York, Macmillan, 1974. xviii, 346 p. 29 x 22 cm. \$10.

The two chief editors, using the talents of many others have done very well in this compilation of text, photographs, maps and bibliographies on historic sites. A durably bound quarto and excellent buy.

2. Hawkes, Jacquetta. Atlas of Ancient Archaeology. New York, McGraw-Hill, 1974. 272 p. 29 x 22 cm. \$19.50

Brief text, diagrams and inferior maps for each site, of human history from Olduvai Gorge to 15th-16th century sites in Mexico and Peru. In spite of its disappointing cartography, both in quality and amount, grads in anthropology are enthusiastic on its high promise for them. Well bound.

3. U.S. Army Corps of Engineers. Washington Environmental Atlas. Washington, DC, Government Printing Office, 1975. iv, 115 p. 54 x 89 cm. paper. LC 74-600033 Pub. # NPSP 1105-1-1 Stock No. 0820-00526. \$48. Prepared by Environmental Resources Section, Seattle District, U.S. Army Corps of Engineers, with the assistance of the Institute for Environmental Studies, University of Washington.

Excellent maps at scale of 1:750,000, shaded relief and eye-appealing. Fifty-three pages on geological, biological factors, seventeen on historical and cultural. Requires extraordinary equipment for filing and too much table surface for a single user, but necessary and recommended for academic collections.

The World Atlas of Food: A Review

by

Marjorie R. Henry
History Department
Seattle Public Library



The World Atlas of Food; a gourmet's guide to the great regional dishes of the world. Contributing editor, Jane Grigson. New York, Simon and Schuster, 1974. \$29.50

This volume is a blend of cartography, travelogue, recipes. Its first section is a discussion of the food stuffs of the world -- meats, poultry, pasta, vegetables -- in a breezy, anecdotal style which may please non-cooks.

We then proceed to the heart, or stomach, of the book - a tour of the cuisines of the world, from the British Isles to China, with text and maps. The maps bear many place names, the titles of local dishes, and quick, lively sketches of ingredients used, such as pigs, eels, cheeses. Recipes cited in the text comprise the final section. Even a hardened old cookbook reader like myself can find little fault with the recipes. As in the case of Basil Soup (Soupe au Pistou) they are eminently workable. And, fellow fish-lovers, Cioppino, appearing here in a simpler version than in some works, begs to be put together.

Alas! The text disappoints. It is too richly anecdotal and is full of gratuitous information about, say, the legumes of Auvergne. A less "World Cavalcade" or early "National Geographic" approach would appeal more to the reader who would use the recipes. The maps relate cuisine to locale in a most helpful way. One veteran cook of my acquaintance was entranced to discover the location of Fukien; it seems that she liked recipes of the region and gained insight into its emphases because she now appreciated its geographical position in China. Recipes for China and Japan are especially memorable.

The use of maps, imaginative illustrations, excellent paper and printing (Amsterdam, although first published in Great Britain) makes "The World Atlas of Food" a visual as well as gustatory delight ... more than "coffee table" fare, and almost worth the price.


 ATLASES CATALOGED AT UCLA
 

by

Anna F. Blustein
 Associate Librarian (Cataloger)
 University Research Library
 University of California, Los Angeles

WORLD

- Whitehouse, David
 Archaeological atlas of the world / David and Ruth Whitehouse ; with 103 maps drawn by John Woodcock and Shalom Schotten. -- London, Thames and Hudson, 1975.
 272 p. : maps ; 25 cm. -- (The world of archaeology)
 Includes bibliographies. ca. \$13.80
- 1. Archaeology - Maps. I. Whitehouse, Ruth. II. Woodcock, John. III. Schotten, Shalom. IV. Title.
- Atlas zur Kirchengeschichte; die christlichen Kirchen in schematische Darstellungen, Kommentare, ausführliches Register. Hrsg. von Hubert Jedin, Kenneth Scott Latour-ette [und] Jochen Martin. Unter Mitwirkung zahlreicher Fachgelehrter bearb. von Jochen Martin. [Kartographische Bearbeitung: Hans E. F. Quast] Freiburg, Herder [1970]
 83, 152, xxxviii p. illus., maps (part col.) 35 cm.
 Includes bibliographies.
- 1. Ecclesiastical geography - Maps. 2. Geography, Historical - Maps. LC 70-654350
- Atlas des cultures vivrières. Atlas of food crops. Par Jacques Bertin [et al]. Cartes de Marie-Claude Lapeyre, Nancy François [et] Monique Veerkamp. Paris, Mouton [1971]
 41 p. 18 fold. col. maps. 42 cm. (Inventaire géographique et chronologique pour un atlas d'histoire mondiale. Geographical and chronological survey for an atlas of world history)

Issued in a case.

Scale of maps 1:55,000,000.

Bibliography: p. 19-41.

1. Field crops - Maps. I. Bertin, Jacques. II. Title: Atlas of food crops. III. Series: Inventaire géographique et chronologique pour un atlas d'histoire mondiale.

LC 72-650069

CANADA

- Canada. Geographical Branch.
 Atlas of Canada / Dept. of Mines and Technical Surveys, Geographical Branch. -- [3d ed.]. -- Ottawa, 1957.
 [vii] p. : 110 fold. leaves of col. maps ; 43 x 54 cm.
 Earlier editions issued by Canada. Dept. of the Interior.
- 1. Canada - Maps. I. Title.
 [Also have 1915 ed., same title. Also have 1973 & 1974 eds., under title: National Atlas of Canada.]
- Swithinbank, Charles
 Ice atlas of Arctic Canada / by Charles Swithinbank ; prepared at the Scott Polar Research Institute, Cambridge, England ... ; maps drawn and reproduced by the Surveys and Mapping Branch, Dept. of Mines and Technical Surveys, Ottawa. -- Ottawa : Canada Defence Research Board, 1960.
 [iv], 67 p. : chiefly col. charts, col. maps ; 52 x 88 cm.
 Bibliography: p. 67.
- 1. Sea ice - Canada - Maps. 2. Sea ice - Arctic regions - Maps.

CANADA (Continued)

- Canada. Hydrographic Service.
Tidal current charts, Vancouver Harbour, British Columbia / Canadian Hydrographic Service, Marine Sciences Branch, Dept. of Mines and Technical Surveys. -- [ed ed.]. -- Ottawa, [1962]
[1] p., 24 p. of col. maps, [1] p. 30 x 41 cm. -- (Tidal publication - Canada, Hydrographic Service; no. 22)
Cover title.
2d ed., 1953, by Canadian Tidal and Current Survey.
1. Vancouver, B.C. - Harbor - Maps.
2. Tides - British Columbia - Vancouver - Maps.

UNITED STATES

- Dodd, Donald B
Historical atlas of Alabama / by Donald B. Dodd ; cartography by Borden D. Dent. -- University, Ala. : University of Alabama Press, 1974.
xiii, 160 p. : col. maps ; 25 cm.
ISBN 0-8173-5226-0.
- Robinson, Arthur Howard, 1915-
The atlas of Wisconsin : general maps and gazetteer / maps prepared at the University of Wisconsin-Madison under the direction of Arthur H. Robinson, Randall D. Sale, Michael L. Czechanski ; edited by Arthur H. Robinson, Jerry B. Culver ; gazetteer prepared at the University of Wisconsin-La Crosse under the direction of Jerry B. Culver. - Madison : University of Wisconsin Press, 1974.
viii, 111 p. : col. maps (p. 2-29) 37 cm.
Scale of sectional maps 1:500,000 or 8 miles to 1 in.
ISBN 0-299-06530-8 & paperback ed.
LC 73-15262 MARC MAP
- Early California : early forts, old mines, old town sites / R. N. Preston. -- Northern ed. -- Corvallis, Or. : Western Guide Publishers, 1974.
76 p. : chiefly ill., maps, ports 44 cm. Cover title. Facsims.

- Early California : early forts, old mines, old town sites / R. N. Preston. -- Southern ed. -- Corvallis, Or. : Western Guide Publishers, 1974.
76 p. : chiefly ill., maps, ports ; 44 cm. Cover title. Facsims.

LATIN AMERICA

- García de Miranda, Enriqueta
Nuevo atlas Porrúa de la República Mexicana / Enriqueta García de Miranda, Zaida Falcón de Gyves. -- 2. ed. -- México : Editorial Porrúa, 1974, c1973.
197 p. : col. ill., col. maps ; 35 cm. At head of title: Atlas.

EUROPE

- Hajducki, S Maxwell.
A railway atlas of Ireland [by] S. Maxwell Hajducki. Newton Abbot, David & Charles, 1974.
39, xxxii p. col. maps. 25 cm.
ca. \$10.20 ISBN 0-7153-5167-2
Bibliography : p. [xxix]-xxxii.
Includes index.
1. Railroads-Ireland-Maps.
LC 74-185563 MARC MAP
- Stoob, Heinz
Deutscher Städteatlas / Hrsg. und bearb. von Heinz Stoob. -- Dortmund : W. Grösschen Verlag, 1973-
v. : ill., maps (some col.) ; 52 x 38 cm.
-- (Acta Collegii Historiae Urbanae Societatis Historicorum Internationalis ; Series C : Atlanten)
Grafische Gestaltung und redaktionelle bearbeitung W. Ehbrecht, D. Overhageböck, P.G. Schulte, Institut für vergleichende Städtegeschichte, Münster (Westfalen).
Issued in Lieferungen, each in a portfolio, with text laid in. Each Lieferung consists of one or more folios, for separate areas, containing text and maps. [Map Library has Lfg. 1 only.]
1. Cities and towns - Germany - Maps. 2. Germany - Historical geography - Maps.

EUROPE (continued)

- Školní atlas československých dějin.
-- 8. vyd. / Odpovědný redaktor,
Petr Cafourek. -- Praha : Kartografie,
1971.
[4], 16, 15 p. 44 p. of col. maps ;
30 cm.
1966 ed. by Czechoslovak Republic,
Ustřední správa geodézie a kartografie.
1. Czechoslovak Republic - Historical
geography - Maps.
- Polska Akademia Nauk. Instytut Geografii.
Narodowy atlas Polski / Polska
Akademia Nauk, Instytut Geografii.
-- Warsaw : ZNiO, 1973-
v. : fold. col. maps ; 41 x 34 cm.
Loose-leaf. Scale varies.
1. Poland - Maps. 2. Atlases, Polish.
I. Title.
- Atlasul Republicii Socialiste România.
[București, Biblioteca Centrala de
Stat, Republica Socialistă România],
1974.
1 v. fold.col.maps. 63x49 cm.
Loose-leaf. Romanian, French, English,
and Russian.
Text and illus. on verso of maps.
Running title: Atlasul Republicii
Socialiste România.
Title on spine: Atlas România.
Cover title: Atlas Republica Socialistă
România.
1. Romania - Maps. 2. Atlases, Romanian.
I. Title: Atlas România.
II. Title: Atlas Republica Socialistă
România.

ASIA

- The Times atlas of China / Editors
and chief contributors, P.J. M.
Geelan, D.C. Twitchett. -- [New
York] Quadrangle/The New York Times
Book Co., 1974.
x2, 144, 27 p. : chiefly col. maps
; 39 cm.
"First published (in part) by Kyobunkaku
Limited, Tokyo, 1973.
First published in Great Britain
in 1974 by Times Books ... London."

AFRICA

- Murdoch, G M
A land system atlas of Swaziland /
G. Murdoch, R. Webster, C.J. Lawrence.
-- Christchurch, Eng. : MVEE
(Christchurch), 1971-
1 v. : maps (1 fold. col. in
pocket) ; 29 x 48 cm.
Loose-leaf. The fold. col. map is
dated 1972. "The work ... was conducted
for Her Majesty's Government by the Dept.
of Agricultural Science University of Oxford ..."
Cover title: Atlas of land systems
in Swaziland.
1. Swaziland - Maps, Topographic.
2. Landforms - Swaziland. I. Lawrence,
C. J. II. Webster, R. III. Oxford.
University. Dept. of Agricultural Science.
IV. Title.
V. Title: Atlas of land systems in
Swaziland.

PACIFIC OCEAN

- California. University, San Diego.
Scripps Institution of Oceanography,
La Jolla.
Bathymetric atlas of the northwestern
Pacific Ocean. Prepared by Scripps
Institution of Oceanography for U.S.
Naval Oceanographic Office. Charts
compiled under direction of T.E. Chase
and H.W. Menard in cooperation with
Undersea Surveillance Oceanographic
Center. Washington, U.S. Naval
Oceanographic Office, 1969.
50 l. maps. (2-50) 41 x 52 cm.
(H.O. Pub. no. 1301)
Bibliography: leaf 1.
1. Oceanography - Pacific Ocean -
Charts, diagrams, etc. 2. Pacific
Ocean - Bathymetric maps. I. Chase,
Thomas E. II. Menard, Henry W. III.
Undersea Surveillance Oceanographic
Center. LC 72-653449 MARC
MAP

WESTERN ASSOCIATION OF MAP LIBRARIES

Individual Members (Principal Region); Associate Members;
 Institutional Members; Information Bulletin Subscribers;
 and Exchange of Publications

Additions & Changes

Since: July 1, 1975

NEWINDIVIDUAL MEMBERS (Principal Region)

Jean Beckner, Special Collections Dept; Honnold Library, Claremont Colleges,
 Claremont, CA 91711

Ms. L.T. Campbell, Love Library, San Diego State University, San Diego, CA.92115

Rosanna Miller, Head, Map Service, Arizona State Univ. Library, Tempe, AZ 85281

Muriel Strickland, Geog. Dept., San Diego State Univ., San Diego, CA 92115

Barry Tobias, Library, Lane County Pioneer Museum, Eugene, OR 97402

Larry G. Carver, Map Librarian, Sci. & Engr. Lib., UC Santa Barbara, 93106

Ann Cousineau, Ref. Dept., Sacramento Public Library, Sacramento, CA 95814

Joe Crotts, Govt. Publ. & Maps, Univ. Lib., Cal. St. Univ., Chico, CA 95929

Robert L. Sathrum, Eureka, CA 95501

NEWASSOCIATE MEMBERS

William J. McCall, Map Librarian, Graduate School of Geography, Clark Univer-
 sity, Worcester, MA 01610

Beverly Chen, Map Librarian, General Library, University of Ottawa, Ottawa, Can.

James B. Case, McLean, VA 22101

John W. Crain, Director, Map Collection, Star of the Republic Museum, P.O. Box
 317, Washington, TX 77880

Alfred A. Herman, Springfield, VA 22150

Randolph S. Symon, Miami University, Oxford, OH 45056

NEWINSTITUTIONAL MEMBERS

Dept. of Geography, Librarian & Map Curator, The University, Southampton, Eng.

University Library, Map Collection, UC Santa Cruz, CA 95064

Richard Fitch, Old Maps & Prints, Santa Fe, N.M. 87501

Library, Serials Dept., University of Guelph, Guelph, Ontario N1G 2W1, Can.

NEWSUBSCRIPTIONS

University of Canterbury, The Library, Private Bag, Christchurch 1, New Zealand

MUN Library, Periodicals Div., Memorial Univ. of Newfoundland, St. Johns, Newfd.

Acq. Div., Carol M. Newman Lib., Virginia Poly. Inst. & State Univ., Blacks-
 burg, VA 24061

Buff-Erie Public Library, History Dept., Lafayette Square, Buffalo, NY 14203

NEWSUBSCRIPTIONS (Continued)

Dr. Vincent G. Mazzucchelli, Geography Dept. K.H. C4067, Calif. State Univ.,
5151 State University Drive, Los Angeles, CA 90032

Serials Dept., Drexel University Libraries, 32nd & Chestnut Sts., Philadel-
phia, PA 19104

Serials Division, Ohio State University Library, 1858 Neil Av., Columbus, OH
43210

Centre de documentation, INRS - Urbanization, Universite du Quebec,
3465 rue Durocher, Montreal H2X 2C6, P. Q., Canada

James Cook University of North Queensland, The Library-Serials, P.O. James
Cook University, Queensland 4811, Australia

Armacost Library, University of Redlands, Redlands, CA 92373

Serials & Binding Dept., University of Rochester Library, River Campus Sta.,
Rochester, 20, NY 14627

Mrs. Wendy Rapley, Microforms-Maps Section, University of Saskatchewan Lib.,
Saskatoon, Saskatchewan S7N 0W0, Canada

Joint University Libraries, Periodicals Dept., Nashville, TN 37203

Periodicals Section, The Library, College of Librarianship Wales,
Llanbadarn Fawr, Aberystwyth, Cards SY23 3AS, Great Britain

Periodicals Dept., The Library, University of the Witwatersrand, 1 Jan Smuts
Ave., Johannesburg 2001, South Africa

NEWEXCHANGE MEMBER

Geo Abstracts Ltd., University of East Anglia, Norwich NR4 7TJ, England

DELETIONS AND CHANGES [refer to 16p. list "Compiled July 1, 1975...."]

From Institutional Member to Subscription: Canada. Dept. Energy, Mines &
Resources, Earth Physics Branch Library, Ottawa, Ontario.

Delete from Institutional Members: San Diego State University, Geog. Dept.

From Institutional Member to Subscription: Librarian, Branch of Astrogeology,
U.S. Geological Survey, 601 East Cedar Avenue, Flagstaff, AZ 86001

Change name from Mary Scholz to Mary Guedon; Alberta Koerner to Alberta Wood.

Delete from Individual Members: Elizabeth Al-Hazzam; Irene Kupfer.

Delete from Associate Members: James O. Minton.

Delete from Subscriptions: Sharon Marsh; Library, Univ. Windsor, Ont., Canada.

Change Subscription from: Akateeminen Kirjakauppa ... Helsinki ... to:
University Library, P.O. Box 312, SF-00171 Helsinki 17, Finland.

ADDENDUMNEW SUBSCRIPTION

Library-Serials Dept., Lakehead Univ., Thunder Bay, Ontario P7B 5E1, Canada

11/7/75

INCOME-EXPENSE REPORT

70

For Period Fiscal Year July 1, 1974 thru June 30, 1975

Date July 21, 1975

and Volume 6 year of Information Bulletin

Previous Balance ... \$ 1,391 17 **A**

INCOME		AMOUNT	
Source			
Dues	Memberships: 86 Principal Region Individual; 48 Associate Individual; 27 Institutional	1,345	00
	Subscriptions to Information Bulletin = 127	635	00
	Sale of Back Issues of Information Bulletin	528	00
	Sale of Occasional Paper No. 1 = 35	140	64
Other Income	Postage on Sale of Back Issues	1	00
	Interest Earned on Funds on Deposit	80	85
TOTAL INCOME		2,730	49

4,121 66 **B**

EXPENSE		AMOUNT	
	Treasurer's Expenses: Invoices, Postage, Printing, etc	36	79
	WAML Meeting Expenses: San Francisco & Vancouver	63	00
	Reprinting of Information Bulletin (Back Issues Sales)	384	25
	Information Bulletin Production Exp. (Incl. Postage)	1,503	65
	General Postage	51	72
	Calif. Sales Tax (collection on Sales of OP #1)	5	04
	Net loss on Short Payments & Bank Conversion Charges		45
	Sanborn Union List Special Project	132	33
	Membership and Information Bulletin Promotion	40	97
TOTAL EXPENSE		2,218	20

2,218 20 **C**

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

NET BALANCE (A+B-C) 1,903. 46

Disposition of Net Balance:
 Deduct Income Due 73/74 - 24. 00
 Deduct Income Due 74/75 - 151. 24
 Add Pre-Payments for 75/76 + 240. 00

Comments or Recommendations: material on hand 7/1/75:

Cash on hand 7/1/75 \$1,968.22

Back Issues Information Bulletin
 estimated value \$1,000.
 Occasional Paper No. 1 (incl. mailing cartons) \$1,868
 Stationery supplies \$ 100
 Postage \$ 11.69
 Promotional Brochures (650 pc.)

Accounts Payable:
 Sales Tax collected on Occasional Paper No. 1 during Calendar 1975 \$2.16