"... when we reached a large village on the north bank, we seemed to have a lot of daylight still at hand, and thought it better to stay at [a village] higher up, so as to make a shorter day's work for to-morrow, when we wanted to reach Kondo Kondo; so we went up against the bank just to ask about the situation and character of the up-river villages . . . One chief . . . took a piece of plantain leaf and tore it up into five different-sized bits. These he laid along the edge of our canoe at different intervals of space, while he told M'bo things, mainly scandalous, about the characters of the villages these bits of leaf represented . . . The interval between the bits was proportional to the interval between the villages, and the size of the bits was proportional to the size of the village . . .

"Now there is no doubt that that chief's plantain-leaf chart was an ingenious idea and a credit to him. There is also no doubt that the Fan mile is a bit Irish, a matter of nine or so of those of ordinary mortals, but I am bound to say I don't think, even allowing for this, that he put those pieces far enough apart . . ."

Schiff, Barry (1989). Aeronautical charts; portraits of the earth. AOPAPilot, March, pp. 78–80, 82. reviewed by Claudette Dellon, Aeronautical Charting Division, NOS/NOAA

Schiff, a pilot, has written a humorous and touching article on his long-standing love affair with aeronautical charts. He views them as pieces of art, portraits of the earth, with which a pilot can "window-shop the world."

A chart is a map modified for use in aerial or maritime navigation and is meant to work on rather than to look at (though some, like Schiff, like to look as well as to work). To maximize the

value of a chart, pilots must learn as much as they can about chart symbology. Schiff feels this can best be accomplished by reviewing the National Oceanic and Atmospheric Administration (NOAA) 112-page booklet, Aeronautical Chart Users Guide. To help remember the differences among largeand small-scale charts, he points out that one inch on a VFR terminal area chart (scale 1:250,000), a sectional chart (scale 1:500,000), and a world aeronautical chart, or WAC (scale 1:1,000,000) equals 4, 8, and 16 statute miles respectively.

Covered also is a history of "navigational maps," dating back to 1807 when President Thomas Iefferson established the Survey of the Coast to map our nation's coasts. The Air Commerce Act of 1926 assigned the task of creating charts for air navigation. The first aeronautical chart was published in 1927, the year of Lindbergh's historic flight. By 1930, sectional aeronautical charts were developed to provide coverage for the entire country. Sectionals, at 1:500,000 scale, provide detail needed for visual navigation of slow- to medium-speed aircraft. Those who fly faster and higher don't need as much detail, and this led to the development of regional aeronautical charts (RACs), followed by WACs, and finally, in the 1960's, operational navigation charts (ONCs) published by the Defense Mapping Agency (DMA). RACs, WACs and ONCs are produced at 1:1,000,000 scale.

In 1970 the name of the Survey was changed to NOAA, of which the National Ocean Service (NOS) is charged with publishing and distributing aeronautical charts. Chart products are described in NOS's free catalog, Aeronautical Charts and Related Products, available from NOAA Distribution Branch, N/CG33, NOS, Riverdale, MD 20737.

In addition to producing ONCs,

DMA produces visual jet navigation charts (JNCs) at 1:2,000,000 scale. Only 122 JNCs are required to cover the entire world, with three covering the continental U.S. The kings of visual charts are the global navigation charts (scale 1:5,000,000') developed for very long range aircraft navigating at very high altitudes. For a free catalog of these and other charts, contact the DMA Combat Support Center, ATTN: PMA, Washington, DC 20315-0020.

Schiff is also fascinated by charts produced by foreign governments. He considers some to be real works of art. The excitement this collector and art lover feels for aeronautical charts is contagious.

# cartographic artifacts

### ALBUM OF MAP PROJECTIONS

USGS Professional Paper 1453 entitled "An Album of Map Projections" by John Synder and Philip Voxland has been prepared to acquaint those in the cartographic profession with the wide range of map projections that have been developed during the past few centuries. Ninety basic projections are presented with consistent and concise textural descriptions and are accompanied by standarized, visual portrayals.

## USGS MAP DISTRIBUTION

The USGS/GPO cooperative map project has been operating for over four years since its inauguration in October 1984. USGS consolidated its eastern and western map distribution facilities into Building 810 in the Denver Center in 1986 in order to realize an annual cost savings of over \$1 million. During the consolidation, 3700 tons of maps and books were delivered to Denver in 185 truckloads.

Building 810 offers some seven-

teen acres of floor space. About 10,500 linear feet of shelving — with 2500 linear feet reaching 16 feet high—holds approximately 100 million sheets representing 70,000 different map titles.

USGS maps are currently produced at the Reston printing facility. Both flat and folded maps are printed in a variety of quantities. Printed materials are stacked three feet high, then strapped to pallets. The pallets wait in a loading area until 40,000 pounds are accumulated—one truck load. At least twice a month, a truck departs Reston for Denver. Adapted form Administrative Notes, April 1989.

#### MAGERT OPEN FILE REPORTS

Titles in this series are generally of an ephemeral nature or are too specialized to warrant general distribution as formal publications. They are available as on-demand photocopies, as a service to the map library community. All orders must be prepaid with a check or money order made payable to Jim Coombs, MAGERT Open File Reports Production Manager. There is a minimum charge of \$3.00 per order. Prices include postage and handling. Orders should be sent to: Map Library, duane G. Meyer Library, Southwest Missouri State University, Box 175, Springfield, MO 65804-0095.

- 86-1 Vick, Nancy J. Guide to U.S. map resources: a personal name index. 1986. 16 leaves. \$1.60.
- 86-2 Sunnen, Linda, and Daniel O. Holmes. Map room acquisition procedures: University of California, Berkeley: a systems analysis. 1984. 36 leaves. (an introductory examination of then current problems with some suggested solutions) \$3.60.

- 86-3 COUNTY COORDINATES (4 corner latitude/longitude; degrees and minutes):
- -CA Robertson, R. Bruce. California County coordinates. 1984. 4 leaves. \$0.40.
- -HI Baldwin, James A. Hawaii County coordinates: including major islands and National Parks. 1987. 4 leaves. \$0.40.
- -IL Wenner, Alex, and Marian Hunter. Illinois County coordinates. [1985] 5 leaves. \$0.50. -MO Wilson, Allen P. Missouri County coordinates. 1988. 6 leaves. \$0.60.
- -UT Robertson, R. Bruce. Utah County coordinates. 1984. 3 leaves. \$0.30.
- -WY Walsh, Jim. Wyoming County coordinates: including National Parks and Monuments, and Wind River Indian Reservation. 1986. 3 leaves. \$0.30.
- 86-4 Vick, Nancy J. Latin America Cutter list: first and second order administrative divisions. August 1988. 30 leaves. (An expansion of the Library of Congress "G" classification schedule; excludes Mexico) \$3.00.
- 86-5 Cobb, David A. United States State coordinates. 1986. 4 leaves. (4-corner latitude/longitude for each state; degrees and minutes) \$0.40.
- 86-6 U.S. National Parks and Forests Cutter list. 1986. 11 leaves. (Library of Congress expansion of "G" classification schedule) \$1.10.
- 86-7 Sample map workforms for M.A.R.C. input. 1986. 8 sheets (some printed on both sides) (Locally devised OCLC, RLIN, and UTLAS input workforms) \$1.50.
- 88-1 Kandoian, Nancy. An English translation of words abbreviated in Ritter's Lexikon. 1988. 4 leaves. \$0.40.

- 88-2 Vick, Nancy. MAGERT alphabetical membership list. February 1988. 20 leaves. \$2.00 (This ORF will be updated biannually).
- 88-3 Lorrain, Janice, and Jim Coombs (with a "tip o' the hat" to Charles A. Seavey). A map to the LC "G" schedule. 1988. 18 leaves. \$1.80. (a new, expanded, and improved set of base maps showing place names and "G" schedule 4-digit area numbers).

#### MAP LIBRARIANSHIP

"Take a map and travel with it"
—that was Clara Egli LeGear's
response to Librarian of Congress
James H. Billington when he asked
her what advice she would give
young people interested in maps
and geography.

Billington, John Wolter (chief, Geography and Map Division) and other staff members paid tribute to Mrs. LeGear for her 74 years of service to the Library at the division's Christmas party in December.

Mrs. LeGear, now 92, has spent a lifetime involved in almost all aspects of map librarianship — cataloging, reference, acquisitions, bibliography, and administration—in the Library's Geography and Map Division. Soon to be published by the Library of Congress is Mrs. LeGear's "Comprehensive Author List," Volume 9 in the List of Geographical Atlases in the Library of Congress.

Clara LeGear joined the Library of Congress as a typist and clerical assistant in December 1914. Eleven months later she transferred to the Division of Maps.

During her first 35 years, Mrs. LeGear served in a variety of positions, including cataloger, reference librarian, assistant chief (1931-1945), and librarian in charge of cartographic acquisitions. After the Second World War Mrs. LeGear relinquished her administrative duties in order to devote full time to writing and bibliographic activities. Her first major publication was a manual on the care and preservation of cartographic materials, Maps: Their Care, Repair and Preservation in Libraries (1949), which quickly became a standard reference work in the field of map librarianship.

With the official designation of bibliographer, she resumed work on a bibliography of atlases in the Library of Congress that had been started by her former chief, Philip Lee Phillips, completing Volume 5 of A List of Geographical Atlases in the Library of Congress in 1958. Earlier she produced a twovolume work, United States Atlases, 1950-1953. She also continued work on the division's card file of bibliographic citations to cartographic literature, which was eventually published by G.K. Hall as The Bibliography of Cartography (5 volumes, 1973).

Retirement from the Library after 47 years of service in 1961 did not put an end to her productivity. Appointed Library of Congress honorary consultant in historical cartography, she went on to complete volumes 6,7, and 8 of A List of Geographical Atlases and continued compiling the Bibliography of Cartography until a fulltime bibliographer was appointed in 1969. As a result of her extremely long and productive career, Mrs. LeGear has received extensive national and international recognition and numerous awards from professional and cartographic organizations. When she received the Honors Award of the Special Libraries Association's Geography and Map Division in 1957, the citation recognized her "as patron saint to anyone interested in historical cartography; as a source of advice and counsel to all; as author of many of the bibles of the profession ...; and

especially...for the very gracious modesty with which all of these things have [been] accomplished."

Two years after her retirement from the Library of Congress, in 1963, Mrs. LeGear received the Library's highest honor, the Distinguished Service Award.

Mrs. LeGear was accompanied at the Geography and Map Division Christmas party by her husband of 50 years, Russell LeGear, who retired from the Library himself after 34 years as a descriptive cataloger. LC Information Bulletin, April 1989

### UNIVERSITY OF MARYLAND OFFERS DUAL MASTERS CURRICULUM

The Geography/Library Sciences (GELS) curriculum of the University of Maryland is a full offering in computer-based spatial analysis and information management—one of the few programs in the United States.

Students earn a Master of
Library Science and Master of Arts
in Geography on completion of a
minimum of fifty-six graduate
hours. Applicants must be accepted by both departments.
Those who already hold a related
graduate degree may be eligible
for advanced standing in the
program.

Contact Dr. Anne S. MacLeod, College of Library and Information Services, Hornbake Library Bldg.—Room 4111E, University of Maryland, College Park, MD 20742, (301) 454-3590; or Dr. Kenneth E. Corey, Department of Geography, 1113 Lefrak Hall, University of Maryland, College Park, MD 20742, (301) 454-2241.

# cartographic events

EVENTS CALENDAR
July 31-August 4: SIGGRAPH '89

(Special Interest Group on Computer Graphics), Association for Computing Machinery Annual Conference, Boston, MA. Contact: SIGGRAPH Conference Office, 111 East Walker Drive, Chicago, IL 60601.

August 6–10: URISA 27th Annual Conference, Boston Marriot Copley Place, Boston, MA. Contact: Tom Palmerlee, Executive Director, URISA, 319 C Street SE, Washington, DC 20003; (202) 543–7141.

August 17–24: ICA International Cartographic Conference 1989, Budapest, Hungary. Contact: Ernó Csáti, Institute of Geodesy, Cartography, and Remote Sensing, H–1373, Budapest, POB 546, Hungary.

September 15–16: GIS: Database and Mapping Applications, sponsored by Lincoln Institute of Land Policy (LILP), San Francisco, CA. Contact: LILP, (800) LAN-DUSE.

September 17–22: ACSM/ASPRS Fall Convention, Cleveland, OH. Contact: John E. Daily, Suite 100, The Honeywell Building, 925 Keynote Circle, Cleveland, OH 44131.

September 18–19: ERIM Fall Conference, "Options for the Federal Agenda for Earth Observations in the Global Change Era," Washington, DC. Contact: Dr. Robert H. Rogers, ERIM, Box 8618, Ann Arbor, MI 48107–8618; (313) 994–1200 ext. 323; FAX (313) 994–1575; Telex 4940991 ERI-MARB.

September 20–23: International Map Dealers Association Annual Conference and Trade Show, Kansas City, MO. Contact: Nancy Edwards, Office Manager, International Map Dealers Association, P.O. Box 1789, Kankakee, IL 60901.