

fugitive cartographic literature

Interesting articles about cartographic information often appear in unexpected outlets. The goal of this section is to bring those publications to the attention of our readership. We invite synopses of papers appearing in journals other than those devoted to cartography, geography, and map librarianship.

Buchanan, Rex and Don Steeples
(1990) On-demand map

publication. *Geotimes*,
April 1990, pp. 19-21.

Reviewed by Terry A. Slocum,
University of Kansas

This article deals with the advantages of computer cartography within the production environment of the Kansas Geological Survey (KGS). Until about 10 years ago, KGS published only two or three large-format maps a year, at a cost of several thousand dollars per map product. With the development of the GIMMAP automated mapping system and associated hardware, KGS is now able to provide a much greater variety of maps on demand; for example, for a request of a cartographic base map (e.g. county boundaries and hydrology) of a portion of Kansas, a customer can be given a hardcopy color map at a cost of \$10-15 within 4 hours.

The GIMMAP mapping system is an in-house product developed at KGS over the last 10 years. It permits one to overlay, update, and correct geographic databases for Kansas such as the public-land survey system, political boundaries, hydrography, transportation networks, earthquake epicenters, gravity data, magnetic data, oil and gas field boundaries, and locations of dry holes.

A key hardware component of the automated production environment is a 44-inch electrostatic plotter with a resolution of 400 dots per inch, and a display palette of 1,024 colors at one time. Such a plotter is very expensive to purchase (\$60,000 when KGS pur-

chased it) and maintain (in excess of \$1,000 per month), but it is useful because of its capability to produce high-quality unique (one-of-a-kind) maps from the GIMMAP system on demand. Many of these maps would be far too expensive to create in a manual environment. (Those wishing to develop a similar production environment should realize that cheaper smaller-format plotters are available.)

In addition to providing unique cartographic products to customers and the KGS research staff in a cost effective and timely manner, the automated production system 1) saves space by not having to store numerous hardcopy versions of maps, and 2) saves money by only producing the hardcopy maps that are certain to be used. There are some problems, however, in implementing an on-demand production environment. One is the nature of archival. For each unique map produced, should one attempt to store a hardcopy version, a softcopy version, or both? Currently, KGS is considering optical disk storage because of its 1,000,000 Mb capacity. Other problems include 1) whether one-of-a-kind maps should be designated as published or unpublished, and 2) the establishment of a referencing system for maps. With regard to the latter, should each unique map receive a new reference number, or should only major revisions receive different reference numbers? Others who are involved in an on-demand map production environment may wish to contact KGS to find out how they are handling some of these problems.

cartographic artifacts

ATLAS REVIEW

Kerr, Donald and Deryck W. Holdsworth, Editors; Geoffrey J. Matthews, Cartographer/Designer. *Historical Atlas of Canada, Volume III: Addressing the Twentieth Century, 1891-1961*. Toronto: University of Toronto Press, 1990. xxiv, 212 pages. ISBN 0-8020-3448-9 (v. 3) \$95.00 cloth. C87-094228-x. The French edition is available from Les presses de l'Université de Montréal. Reviewed by William G. Loy, University of Oregon

Canada is rich in atlases. The National Atlases of 1906, 1915, 1957, 1974 and 1985 give synoptic views for those dates and now a three-volume set of historical atlases will provide a time-phased view of the nation. This atlas is another jewel in the crown of Canadian atlases.

As a book this atlas is large, but not huge, and reasonably priced at \$95. It measures 37.7 cm in height (14.8 in.), 27.7 cm in width (10.9 in.), 3 cm in thickness (1.2 in.), and it weighs 2.3 kilos (5.1 lbs.). The atlas comes plastic-sealed in a sturdy box. The cover is a very substantial binder board covered in a top-quality black cloth stamped in gold on both the cover and the spine. There are no endpapers. The paper is matte and unusually heavy, approaching the weight of index card stock. The eye-catching dust jacket is dark with shining railroad rails reflecting a sky lit by the sun below the horizon. The reader is left to ponder the significance. Perhaps the sunrise of a nation, perhaps the sunset of an atlas project, perhaps. . .

The three-volume historical atlas project began in 1969. By 1979 financial backing from the Social Sciences and Humanities Research Council of Canada (SSHRC) was