

cartographic perspectives

Number 8, Winter 1990-91

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cartographic perspectives on the news

MAPS & WAR

... whatever our politics and social conscience, we cannot deny the strong historical bond between map and soldier, nor can we dispute that much of the present digital cartographic effort is inspired or sustained by a concern for national defense.

Mark Monmonier, Technological Transition in Cartography, 1985

Operating at a wartime pace, the U.S. Defense Mapping Agency says it has shipped 35 million maps to the nearly 300,000 U.S. troops stationed in the Persian Gulf.

Cartographers at the agency's two major production centers in St. Louis and Brookmont, MD, have been working ten to twelve hour shifts, seven days a week since shortly after the United States began sending troops to the Persian Gulf.

All of Saudi Arabia, Kuwait and Iraq have been committed to paper, Black said. The agency has had every country in the volatile Middle East mapped for several years, relying heavily on detailed satellite photos.

Map production already has overstepped what was done

cartographic perspectives

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during the Korean and Vietnam wars.

"During the Korean War, the presses ran twenty-four hours, seven days a week for years," said Otto Stoessel, graphic arts chief of the aerospace division. "We turned out a lot of work, but compared to Operation Desert Shield it was nothing."

"We've done ten times the amount of work in the last two months than we did during all of Korea," he said.

"*Mideast operations draw mapmaker's bottom line.*" R.B. Fallstrom, AP (Centre Daily Times, December 25)

One of the major efforts undertaken by the FSO [Field Support Office of the United States Army Engineer Topographic Laboratories (USAETL)] has been the transformation and dubbing of

Digital Terrain Elevation Data (DTED) from Defense Mapping Agency (DMA) 9-track tapes . . .

So far, USAETL has transformed and dubbed more than 16,000 floppy disks of DTED covering the Desert Shield region and distributed them to various units and organizations . . .

One of the systems that will use some of the data being provided by the FSO is USAETL's Digital Topographic Support System Prototype (DTSS-P). The DTSS-P is made up of terrain analysis software residing on a Portable All-Source Analysis System Work Station (PAWS) . . .

The DTSS-P will provide Desert Shield units with the capability to perform automated terrain analyses such as line-of-sight calculations, cross-country movement analyses, construction support and map background display. These products can provide timely support to field commanders.

TAC [USAETL's Terrain Analysis Center] is working with scientists from USAETL's Geographic Sciences Laboratory (GSL) and RI [USAETL's Research Institute] to develop another way of "seeing" the terrain of Saudi Arabia. This digital terrain data base for simulation networking is funded by the Defense Advanced research Projects Agency.

Using the USAETL data base, a system operator will be able to generate a "flying carpet" fly-through view of the terrain. A mobile "flying carpet" will be placed in the van which previously contained the Terrain Analyst World Station.

"USAETL performs extensive and essential role of support." *Tech-Tran* 15:4, Fall 1990

How good is the Iraqi Army now? A serving soldier observed Iraqi soldiers on a daily basis for four months as the captive of a Republican Guards unit following the

invasion of Kuwait. He considers the Guards "damn good for an Arab force" but no match for the Allied forces . . .

He said that the soldiers were frightened of their officers and especially of their political minders and were instantly obedient. The junior-grade Iraqi officers were much like the old-style Brit officer with a superior elitist attitude complete with batmen and a flunky to carry their maps.

"*Mismatch in Kuwait.*"

Col. David H. Hackworth,
Newsweek, January 28.

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Philadelphia Inquirer, January 27

At one point [General Schwartzkopf] phoned the Navy to ask what Iraqi targets the USS Wisconsin could hit with its sea-launched Tomahawk cruise missiles. The answer came back: zero. The Tomahawks must be programmed with electronic terrain maps to home in on their targets. The CIA and DIA, preoccupied with monitoring the Soviet Union's withdrawal of conventional forces in Eastern Europe, hadn't programmed their satellites to make such maps for Iraq. The maps didn't arrive until the end of August.

"*The road to war.*" Tom Mathews and others, *Newsweek*, January 28.

Since war broke out in the Persian Gulf, television coverage has been shaped by a single question: Who's winning? . . .

Michael Schiffer, a media analyst at the Center for War, Peace and the News Media in New York, said the agenda for coverage is set largely by daily briefings in Washington and Riyadh.

"There's a tendency to treat it like a football game," Shiffer said. "There's a scorecard, whether you're keeping score in tonnage, or in body counts, or maps with tanks and little arrows."

"Military hype weighs down coverage." Marc Gunther, Knight-Ridder Newspapers (Centre Daily Times, February 3).

Notable among the many maps of the Persian Gulf which have appeared recently is the room-sized map used by Peter Jennings on ABC. Mr. Jennings walks across the map, using his feet to point out pertinent locations. The map is large enough to require Mr. Jennings to take several steps between Jerusalem and Baghdad, and it extends up the wall behind him to suggest an impossible proximity to Turkey and the Soviet Union. Somewhat incongruous is the conflict of scale between Mr. Jennings as a pointer moving within the borders of the map.

Amid chants of "What do we want? Peace! When do we want it? Now!", twenty anti-war protestors were arrested from a group demonstrating outside the Defense Mapping Agency in St. Louis, Missouri.

Overheard on National Public Radio's All Things Considered, February 20.

THE CORPORATE WORLD OF MAPS

The following is excerpted from Jennifer Steinhauer's piece "With computers, mapmakers are redrawing the world", which appeared in the "All About" section of the Sunday *New York Times*, December 2, 1990.

"Modern map-making has become corporate, the domain of computer wizards, marketing experts and board room warriors embroiled in legal debates over tax status and copyrights. The International Map Dealers Association estimates that commercial sales in the United States have reached \$200 million annually.

"The major companies, privately held, keep sales figures to themselves. The industry association and many executives consider the Rand McNally Company of Skokie, IL, the largest. Next, by most accounts, is Munich-based Langenscheidt, which owns several American map companies that, combined, are second in sales. Then come Simon & Schuster, a Paramount Communications subsidiary that owns Mobil Road Atlas and Gousha, and then Hammond Inc. The United States Geological Survey and the National Geographic Society are also major producers, but the leading companies regard only the Society as a competitor.

"Increased travel by Americans is propelling industry growth of 10 to 12 percent a year, executives say. Edward W. Patton, sales director for Alfred B. Patton Inc., a map maker in Doylestown, PA said that for American travelers to the Soviet Union and Eastern Europe, 'This whole glasnost thing has really opened up a demand for maps.' Maps of China, meanwhile, are passé.

"When it isn't a pleasure trip that sparks demand, it's a crisis. Anxious oil executives and soldiers' parents are suddenly concerned about the layout of Kuwait. Most map makers and stores say they have sold all their Middle East maps. 'Any time there are cataclysmic events that involve confrontation, you have a tremendous increase in interest in maps of the area,' said Conroy Erickson, a Rand McNally spokesman.

"Maps can be marketed as specifically as food products. The computerized map maker can easily create products with extra detail and features, or no frills. Some companies say they are working on designs for children; Hammond's children's atlases includes a world map with dinosaur fossils pictured where they were found.

"The National Geographic Society, known for detailed and elegant maps, is also known within the industry for its non-profit, tax-exempt status. No fair, say some companies, who demand a playing field as flat and level as their maps.

"Some industry executives say National Geographic is too much of a rival already. 'We view them as a competitor with a big advantage as a non-tax-paying entity,' said Ms. Hammond. Her husband, Dean Hammond, the company's president and chief executive, testified a few years ago at a Senate hearing that the Society should have its non-profit tax status revoked. He got no response. 'They are very well-connected politically,' said Ms. Hammond.

"National Geographic responds that all map makers benefit from its high profile. 'Our campaign to return the study of geography to the American classroom has only helped them,' said Barbara Moffet, a Society press officer. 'We've created a renewed interest in maps and made them more popular than ever. It's good for the whole industry.'"

GERMAN UNIFICATION A CARTOGRAPHIC DILEMMA

The June 1990 issue of *GeoKartenbrief* (GeoCenter, Stuttgart) includes a commentary concerning German unification and its eventual impact on German

(continued on page 31)

monographs. B V Gutsell, founder and editor. ISSN 0317-7173. Contact: University of Toronto Press Journals Department, 5201 Dufferin Street, Downsview, Ontario, Canada M3H 5T8; (416) 667-7781.

Cartographic Journal. Biannual Journal of the British Cartographic Society. Includes research articles, 'shorter' articles, official records of the Society, book reviews, and list of recent cartographic literature. Contact: Hon. Secretary, Charles Beattie, 13 Sheldrake Gardens, Hordle, Lynton, Hants. SO4 10FJ England.

Cartography. Biannual Journal of the Australian Institute of Cartographers. Each issue contains two parts, the Journal proper and the Bulletin. The Journal contains original research papers, papers describing applied cartographic projects, reviews of current cartographic literature and abstracts from related publications. ISSN 0069-0805. Contact: John Payne, Circulation Manager, GPO Box 1292, Canberra, A.C.T. 2601, Australia.

Cartography Speciality Group Newsletter. Biannual publication of the Cartography Speciality Group of the Association of American Geographers. Contact: Ellen White, Editor, CSG Central Office, Department of Geography, Michigan State University, East Lansing, MI 48824; (517) 355-4658.

Cartomania. This quarterly newsletter of the Association of Map Memorabilia Collectors offers a unique mix of feature articles, news, puzzles, and announcements of interest to cartophiles. ISSN 0894-2595. Contact: Siegfried Feller, publisher/editor, 8 Amherst Road, Pelham, MA 01002; (413) 253-3115.

Geotimes. Monthly publication of the American Geological Institute. Offers news feature articles, and regular departments including notices of new software, maps and books of interest to the geologic community. Articles frequently address mapping issues. ISSN 0016-8556. Contact: Geotimes, 4220 King Street, Alexandria, VA 22302-1507.

GIS World. Published six times annually, this news magazine of Geographic Information Systems technology offers news, features, and coverage of events pertinent to GIS. Contact: Julie Stutheit, Managing Editor, GIS World, Inc., P.O. Box 8090, Fort Collins, CO 80526; (303) 223-4848; fax: (303) 223-5700.

Information design journal. Triannual publication of the Information Design Unit.

Features research articles reporting on a wide range of problems concerning the design and use of visual information. Contact: Information design journal, P.O. Box 185, Milton Keynes MK7 6BL, England.

FEATURED PAPERS

All featured papers will be solicited by the NACIS Publications Committee. The goals of the solicitation procedure will be to select high quality papers that provide a balanced representation of the diverse interests of the membership. The primary mechanism for soliciting featured papers will be a paper competition held in conjunction with the Annual Meeting. All papers prepared for the meeting and submitted in written and/or digital form will be considered. Three of these will be selected to appear in *Cartographic Perspectives* during the next year.

In addition to the competition winners, the Publications Committee (in consultation with the editors) will solicit one or more papers each year from other sources. The goal here is to ensure that all aspects of the membership are served and to attract some thought-provoking ideas from authors who may not be able to attend the annual meeting.

Authors of selected papers will be given an opportunity to respond to suggestions of the Publications Committee before submitting a final version. The writing quality must adhere to high professional standards. Due to the interdisciplinary nature of the organization, it is particularly important that papers are carefully structured with ideas presented succinctly. The editors reserve the right to make editorial changes to ensure clarity and consistency of style.

Papers ranging from the theoretical/philosophical to methodological/applied topics will be considered providing that ideas are presented in a manner that will interest more than a narrow spectrum of members.

To be considered for the paper competition, papers should be prepared exclusively for NACIS, with no major portion previously published elsewhere.

TECHNICAL GUIDELINES

Cartographic Perspectives is designed and produced in a microcomputer environment. Therefore, contributions to CP should be submitted in digital form on 3.5" or 5.25" diskettes. Please send paper copy along with the disk, in case it is damaged in transit.

Text documents processed with Macintosh software such as *WriteNow*, *WordPerfect*, *Word*, and *MacWrite* are preferred, as well as documents generated on IBM PCs and compatibles using *WordPerfect* or *Word*. ASCII text files are also acceptable.

PostScript graphics generated with Adobe *Illustrator* or Aldus *FreeHand* for the Macintosh or Corel Systems' *Corel Draw*, *MicroGrafx Designer*, or Computer Support Corporation's *Arts and Letters* are most preferred, but generic PICT or TIFF format graphics files are usually compatible as well.

For those lacking access to microcomputers, typed submissions will be tolerated. Manually produced graphics should be no larger than 11 by 17 inches, designed for scanning at 600 dpi resolution (avoid fine-grained tint screens). Continuous-tone photographs will also be scanned.

Submissions may be sent to: David DiBiase, Department of Geography, 302 Walker Building, Pennsylvania State University, University Park, PA 16802; (814) 863-4562; email: dibiase@essc.psu.edu

COLOPHON

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(continued from page 3)

cartography. The dilemma is that there is one Germany with two cartographical systems. The dissimilarity of the two mapping systems reflect dissimilar political patterns. The former GDR's topographical and geological mapping system was oriented to the COMECON standard, one which is hardly compatible with the Federal Republic's standard. How is cartographical unification going to be achieved? "Probably, it will end up in GDR's cartography assuming the Western norms. . . Surely the German cartography, complicated enough at present, will turn more intricate in the future, and cartographers will have a lot of work to do."