

## MAP REVIEW

**Michelin's Central Washington DC Street Map**

*Reviewed by Sally S. Summerall,  
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As a map designer at the National Geographic Society and a Washingtonian, I find myself in the unique position of reviewing Michelin's new map *Central Washington DC* and comparing it to two well-known maps of the area — Travel Vision's *Washington, DC and Vicinity Road Map* and National Geographic's *Tourist Washington, DC*.

Michelin has done an admirable job producing its first map of a city in the United States. *Central Washington DC* is a big map (43"x 39"). It is informative to the point of symbolizing all the one-way rush-hour streets. The design isn't overly innovative. This map can stand alone or be used in conjunction with Michelin's *Green Guide to Washington, DC* which is informative and, in the Michelin tradition, guides the traveler to points both interesting and unusual.

When comparing it to its counterparts, there are similarities and differences in graphic treatment, paper size, map scale, and typography. The geographic facts of Washington, DC are for the most part a constant so it is up to the map designer, researcher, and/or compiler to create a visually appealing product that invites the user's interest and ensures readability. By exploring the various graphic and cartographic elements we can evaluate and compare how each of the maps succeeds, or fails, in delivering clear and concise information yet remain strong visually.

Michelin's *Central Washington DC* and Travel Vision's *Washington, DC and Vicinity Road Map* are similar in graphic treatment and paper size. Both are printed on large sheets of paper, although

Michelin's map — disappointingly — is printed only on one side. Although each shows downtown Washington, Travel Vision uses both sides of the paper to include a large map of the areas in and around the Virginia/Maryland Beltway. Michelin's inset map of the beltway is too small and difficult to read mainly because all of the roads are printed in the same red color with very little distinction between line weights.

The maps depict outlined city blocks and use similar pastel color schemes for background fills. Michelin's *Central Washington DC* does go one step further than Travel Vision's map — Points of Interest, Other Buildings, Parks and Cemeteries are also color coded. Both maps incorporate detailed line drawings of key government buildings. And both use a variety of symbols to depict various sites.

Symbols on maps can either be very helpful or just plain 'cartographic noise.' Travel Vision's map works very hard at naming each site represented by a symbol. In contrast, the user must study the legend more closely on the Michelin map in order to understand the symbolization. One symbol on the Michelin map that is an example of cartographic noise is the cemetery symbol. It is used as if it were a pattern instead of labeling a site. It just doesn't work. Arlington National Cemetery clearly designated in a bold face type should be enough to guide prospective visitors to this historic landmark.

The graphic treatment and size of National Geographic's *Tourist Washington, DC* is distinctly different from the Michelin and Travel Vision maps. *Downtown Washington, DC* is depicted in tones of gray, green, and red along with white for roads and blue for water areas. The other side, *Metropolitan Washington, DC* is designed using the same colors

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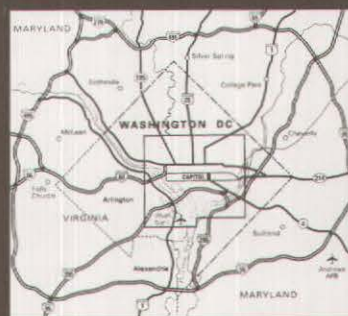


## Central Washington DC Street Map

1:10 000

1 inch = approximately 830 feet / 1 cm = 100 meters

points of interest • public buildings and services  
metro stations • one-way streets



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with the addition of yellow-orange to clearly indicate the District of Columbia. The symbol design is conservative, limited to black squares, dots or triangles.

Designed to fold down to pocket size, when opened the National Geographic map shows downtown Washington, DC at almost the same scale as the much larger Travel Vision map, which in turn, is half as large as the Michelin map. In this case, one wonders why Michelin chose to use such a large format. And, in this day and age, why didn't they choose to utilize both sides of the paper? This map is too big to handle in the car while simultaneously maneuvering around all the DC traffic circles and one-way rush hour streets. It is also unwieldy when trying to refold.

Map typography is a real art, and a dying art. Many a cartophile



will tell you it's the typography that sets the great maps apart from the average ones. Selecting appropriate typesets when designing and compiling a map should, therefore, not be taken lightly. Not all typesets work well on maps. For that very reason, early in the history of National Geographic's Cartographic Division, Charles Riddeford designed typefaces exclusively for use on National Geographic's maps to give them character and an identity. The rest of the map-making world, it seems, is resolved to use such typefaces as Helvetica and Franklin Gothic.

Unlike its counterparts, Michelin uses predominantly Helvetica and members of its font family such as Helvetica Condensed. Overall, it's used well. But if, as on Travel Vision's map, they had used a few serif typefaces such as Times Roman, New Century Schoolbook or Memphis for drainage, water or large land features, Michelin could have presented us with an award winner. When only sans serif typesets are used, the map can take on a 'produced on a computer' look. And, unfortunately, there are too many maps made today that have that similar look.

In conclusion, except for the size, I enjoyed using Michelin's new map *Central Washington DC*. I'd like to add that as more and more cartographers are designing, compiling and producing maps on computers they are faced with the challenge of remembering that the computer is only a tool. Strong typographic skills, a good sense of color, and a keen visual mind are paramount. It is the mapmaker's creative energy that produces useful, informative and beautiful maps.

*Editor's note: Michelin's Central Washington DC Street Map earned a Best of Category Map Series award at the 1992 Map Design Competition of the American Congress on Surveying and Mapping.*

## BOOK REVIEW

**Abrams, L.N. (1991) *Our Secret Little War*.** Bethesda, MD: International Geographic Information Foundation, 87 pp. Softcover \$35. ISBN 0-944426-47-6. Library of Congress Catalog No. 91-071237

*Reviewed by Michael Russell Rip, Michigan State University.*

Automated mission planning and rehearsal systems (MP&RS) saw widespread use during Operation Desert Storm. The US Air Force, Navy, and Marine Corps credit such computerized systems with saving many aircraft and pilots from destruction by minimizing the number of sorties flown and ordnance delivered to achieve the desired objective. In fact, MP&RS enabled F-117A Stealth Fighters to plan their critical missions over the heavily-defended Iraqi capital, Baghdad. Rehearsing a mission prior to leaving the ground enabled pilots to develop a familiarity with the target area and decide on appropriate attack strategies and how best to use terrain to mask their approach and exit. Pilots employed these terrain visualization techniques to better understand the target and surrounding area, and plan flight information, routes, and produce flight maps. How this was achieved using MP&RS is one of the better kept 'secrets' of the 1991 Persian Gulf conflict. Two commercial remote sensing satellites, as well as a number of military satellite and aerial platforms, provided digital imagery at various spatial and spectral resolutions. LANDSAT and SPOT satellite imagery combined with digital terrain elevation data provided by the Defense Mapping Agency (DMA) within a MP&RS environment allowed for the development of three-dimensional perspective views along specific flightpaths and pilots were able to

interactively 'walk/fly through' areas of interest.

If military targets are visualized, and aerial bombing missions and attacks planned and practiced this way using digital computers in 1991, what techniques were used in earlier times, especially the military campaign waged against Western Europe during World War II? This is the subject of Abrams' book *Our Secret Little War*; something that appears to have been neglected in the plethora of titles dealing with the history of the Second World War.

In a capsule, this interesting 87-page book is the story of Leonard Abrams and his career — and those of many Allied men and women — in the model shop, officially referred to as V-Section. This joint British-American team were responsible for constructing accurate and highly detailed scale models of strategic and tactical targets and battlefields from aerial reconnaissance photographs. Many of the most important land, sea, and air attacks undertaken in western Europe during World War II were planned using these models. For example, a scale model of Peenemunde not only enabled intelligence experts to infer the real purpose of the site — the testing of the secret German V-weapons — but also became a briefing model for planning the successful heavy bomber attack.

Happily, this book is profusely illustrated with 32 pages of interesting, and in many cases never before seen black and white photographs of the three-dimensional scale models, including the only color photograph of the 1:5,000 scale Normandy (Cabourg-sur-Dives) model used in planning the D-Day invasion. From these pictures and text, the reader will come to respect the modelers' skills and techniques. In fact, the scale models were so detailed that it is difficult to distinguish the photograph of a model from a