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MEMBERSHIP

Membership in the Society is open to any person actively engaged in the practice of photogrammetry, photointerpretation, remote sensing, and geographic information systems; or who by means of education or profession is interested in the application or development of these arts and sciences. The annual dues for Regular members are $65.00. Annual dues for accredited Student members are $25.00. Add $20.00 for all international memberships to cover cost of postage. (All memberships are on a calendar year basis.) Printed in the United States of America.

Cover Image—This natural color digital orthophoto of Washington, D.C. shows the Capitol and surrounding area. The orthophoto data set was produced from Kodak Aerocolor Negative Film Type 2445 exposed at a scale of 1:30,000 using a Wild RC20 camera during August 1989 and the final map scale is 1:24,000. Scanning of the unrectified aerial photograph was performed on a high resolution transmissive scanning system using a pixel size of 25 microns resulting in a ground resolution of 2.5 feet. Orthophoto rectification was carried out on a high performance digital orthophoto work station developed by International Imaging Systems, Inc. The hard copy filmwriting was developed using a Cirrus Technology, Inc. L.C. 3000 film writing device.

All phases of the production, including image acquisition, film processing, Digital Elevation Model development, digital orthophoto rectification and hard copy reproduction were undertaken by Photo Science, Inc. at its Gaithersburg, Maryland headquarters.

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About the Disk

A 5.25-inch floppy disk containing a portion of the digital file used to make the cover of this issue is inserted near the middle of the magazine.

The data in the file "CAPITOL.GIF" (640x480 pixels and 256 colors) have been resampled to increase the pixel size from 2.5 feet to 5 feet; thus the screen image covers an area 3200 feet (about 1 km) wide. Using your own software, this image format can be viewed directly on or can be converted for viewing on a large variety of computing platforms. Also read the ASCII "READ.ME" text file.

For MS/PC-DOS platofrms, viewing software (with detailed documentation) has been included. A super VGA display of 640x480 pixels and 256 colors is the minimum resolution recommended; however, a standard VGA display of 320x200 pixels (256 colors) is accommodated. For easy access to the imagery, type "DO" at the DOS prompt for the disk drive in which you have placed the disk.

The original scanning produced 24-bit data (8 bits or 256 colors in each of the red, green, and blue spectral bands) which was composited for this floppy to an 8-bit image using a selected color palette of 256 colors. The smaller composited file was developed to simplify distribution and, because most PC users now do not have 24-bit display adaptors, to allow display on a larger installed base of PC equipment.

The Digital Orthophoto floppy is intended to demonstrate to the cartographic, geographic, and remote sensing communities the concept of producing digital imagery from conventional aerial photography. It is hoped that this sample will also encourage further improvements in the technology, stimulate ideas for applications by potential users of digital orthophotographs, and encourage industry to prepare for producing similar products.

Production of the floppy disk has been a collaborative effort of the American Society for Photogrammetry and Remote Sensing, Photo Science, Inc., the U.S. Department of Agriculture Soil Conservation Service, and the U.S. Geological Survey.