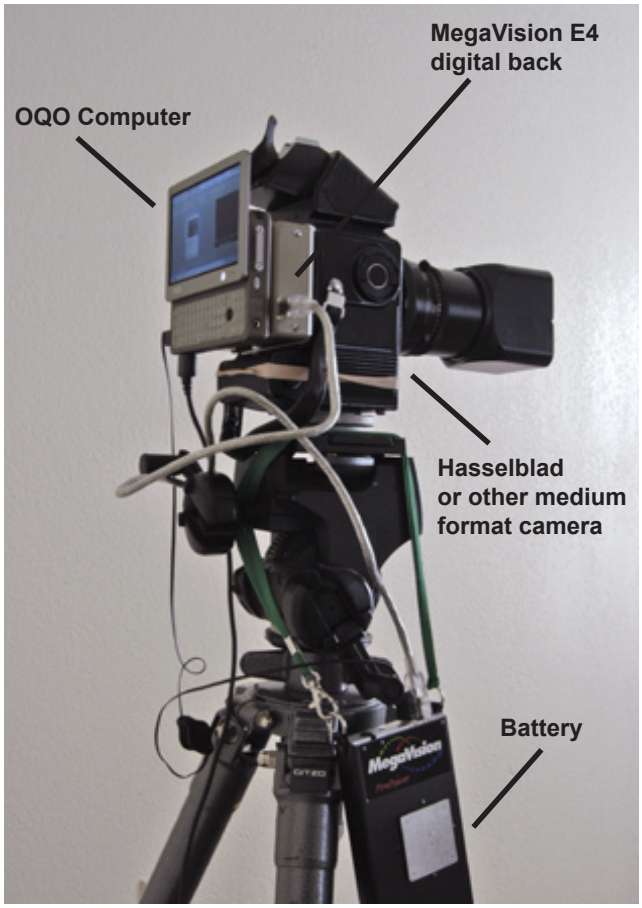
FLAAR Reports

February 2006

A Unique 16-Megapixel B&W Fine Art Photography System

MegaVision Dedicated B&W-Only Medium Format Digital Camera Back

Nicholas M. Hellmuth



Since we have two 25-year old Hasselblad ELX camera bodes and a wide selection of corresponding Zeiss lenses, we tend to use these venerable bodies rather than spending a fortune on a nice new H2.

We outfitted the ELX with a Beattie screen enhancer (with split-screen capability), since there is no auto-focus with these elderly Zeiss lenses.

The rubber band around the lower part of the Hasselblad is because although Hasselblad camera bodies last forever, the weak link in the chain is the attachment of the cover of the batteries. The back hinge is too small, hence too weak, and eventually wears down or chips off. Also, the pressure is far too strong. We replaced the older 2-battery system to a multi-battery AA set-up. This hinge set-up chipped off after using it twice.Otherwise, Hasselblad is one of the great camera bodies, in part because you can still get most parts.

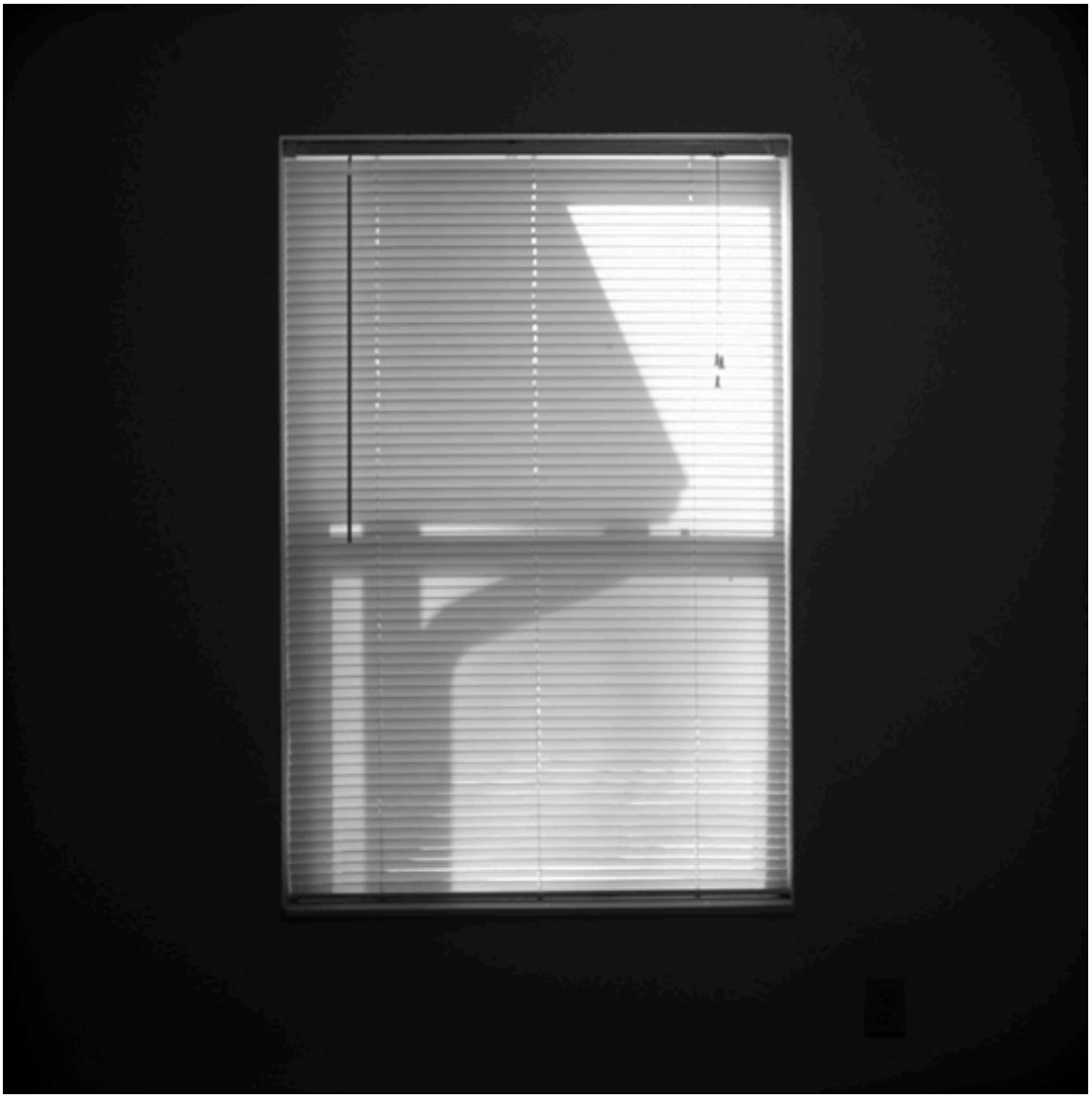
We use a heavy-duty Gitzo Studex tripod (the original heavy one), and a geared Manfrotto tripod head. These are the two best studio items I have used in over 30 years of professional studio photography. Both are available from www.BogenImaging.com

Brent Cavanaugh, lab manager and instructor in digital photography, with Nicholas Hellmuth learning how to use the MegaVision during the first days of evaluation.

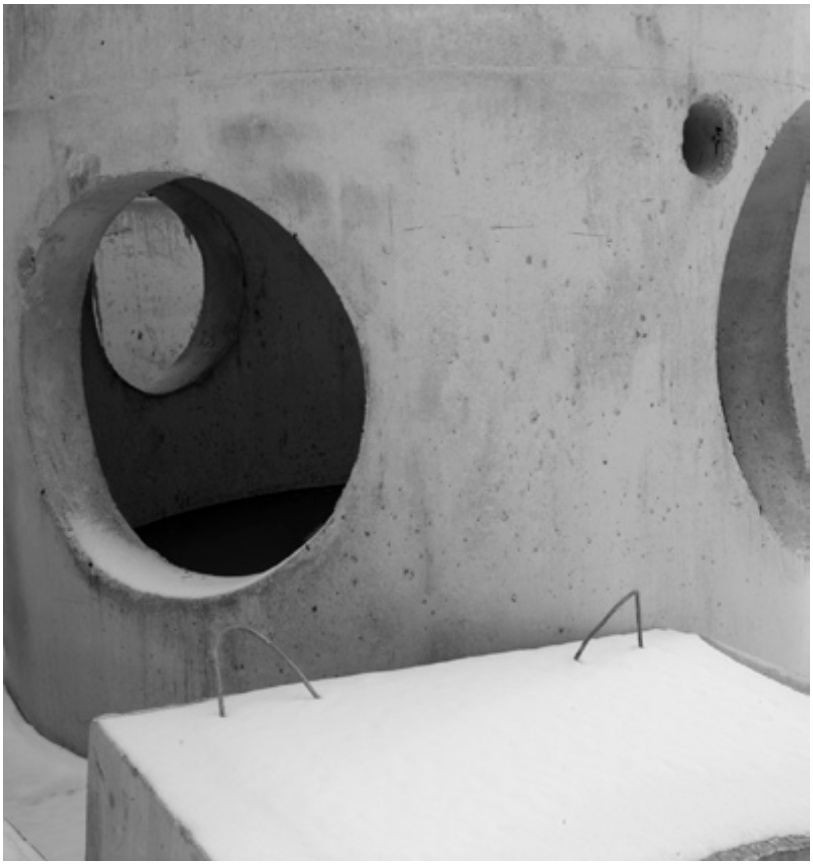
Dubai at night. The MegaVision handles night shots acceptably.

First day of practice with the MegaVision in Dubai, United Arab Emirates. (South of Iraq, just a few kilometers west of Iran.) Since I have been using a Macintosh for the last decade, it took a while to get used to the PC computer and Windows operating system.

Light, shadow, and shapes.



As the angle of the sun changes, so do the shapes.



The MegaVision worked better than the Leaf digital back in cold weather.

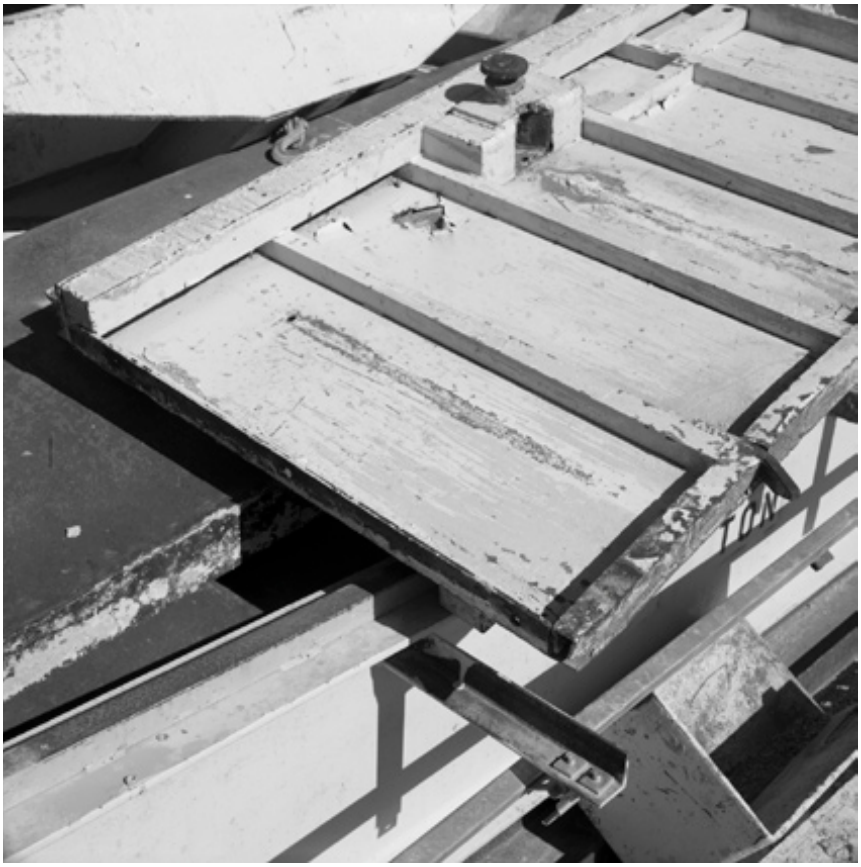
We thank Mast Industries for providing permission to photograph their concrete culverts. This is one of the most photogenic places I have found locally and is an excellent place to test digital cameras. In the future I would like to present them with a calendar illustrated with their products.

Light, shadow, and shapes are all ingredients for fine art photography.
The MegaVision E4 dedicated B&W digital back is ideal for fine art photography.


MACK OF TOLEDO
ASTM B-478
W/B




Plastic tubing piled up at a construction site.



What sets the MegaVision E4 B&W back apart from all other backs is that it has crisp focus detail. Your vision, and the vision of the CCD, is not obscured and made fuzzy by the Bayer Pattern of color filters nor a moiré filter.

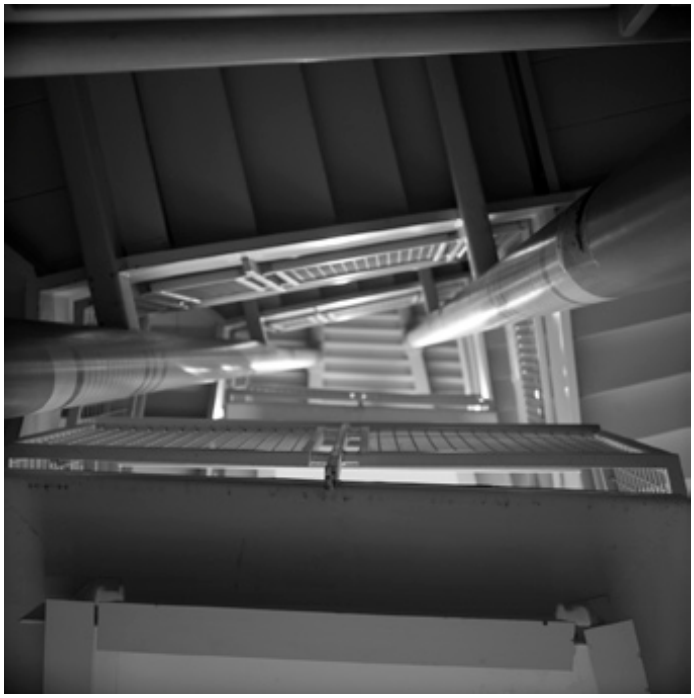
One reason that FLAAR is evaluating this camera is because we believe, that in addition to its abilities as a fine art camera for black-and-white enthusiasts, this MegaVision E4 may be ideal for archaeologists, architectural historians, and people who prefer, or need, to use digital capture equipment, but who are not satisfied with the weak focus and noticeable lack of sharpness of virtually every digital camera.

Photo by Sonya Ives using the MegaVision E4.

Photo by Nicholas Hellmuth using the MegaVision E4.

Photo by Sonya Ives using the MegaVision E4.

Photo by Nicholas Hellmuth using the MegaVision E4.



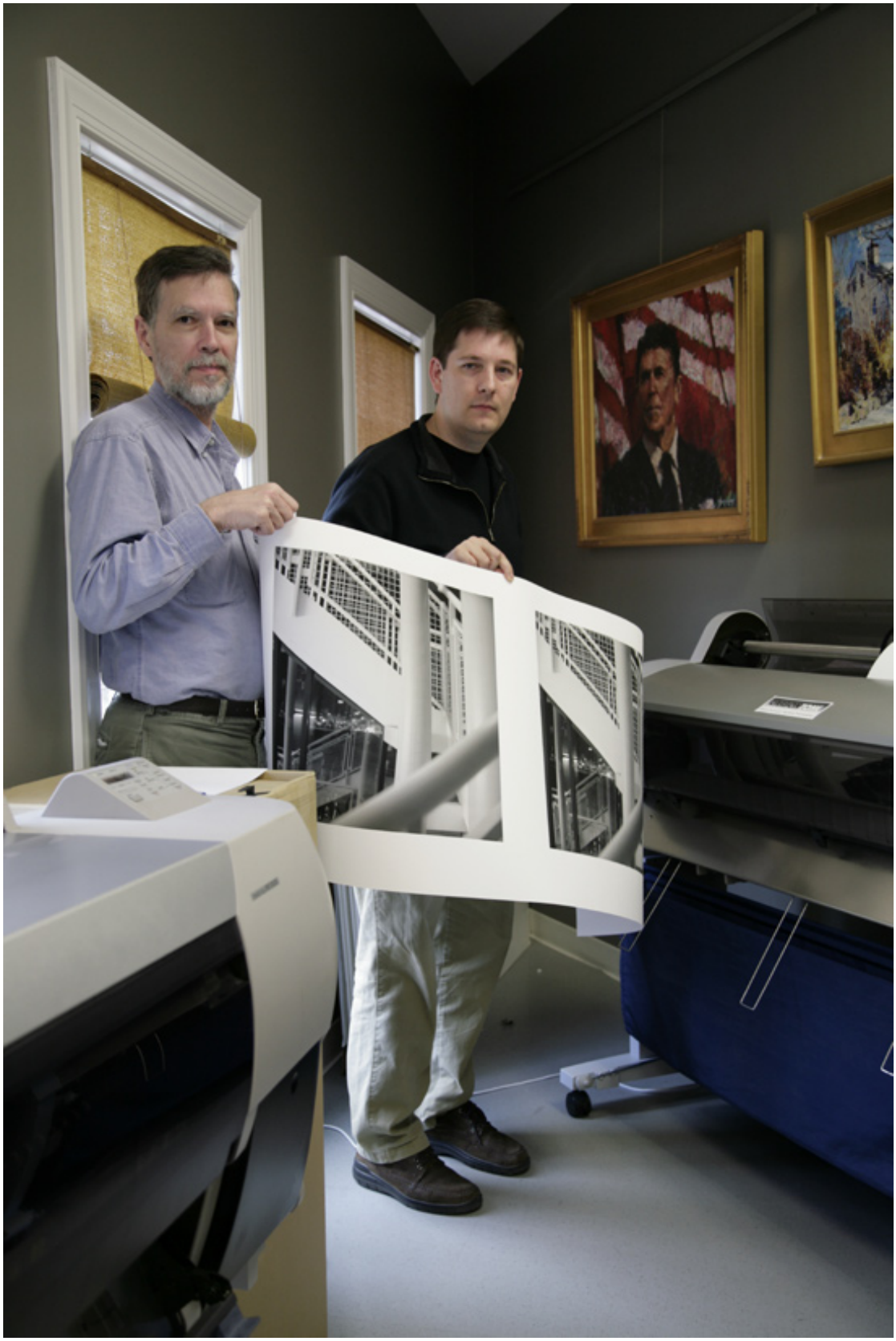
Photos by Sonya Ives and Nicholas Hellmuth using the MegaVision E4.

Photo by Sonya Ives using the MegaVision E4.

Photo by Nicholas Hellmuth using the MegaVision E4.

Photo by Sonya Ives using the MegaVision E4.

Inspecting black and white printouts at Fine Art Impressions, Charlotte, NC. The prints were done courtesy of Gary Kerr, with his trademarked CarbonTone use of a seven tone inkset from Jon Cone



Although there are various ink choices for quad-black, the only seven tone system is from Piezography. Most people use an old Epson printer for this, usually a 7600 after they have acquired a newer 7800 for the regular Epson inks. The newer HP printers will also offer 8-ink channels, but no after-market B&W inks are available.

Karalynn Repie using the MegaVision E4 in the Botany Department greenhouse at BGSU.

Karalynn Repie using the MegaVision E4

At PMA photography trade show it was possible to get samples printed from a Durst RGB printer.

FLAAR Reports

Brent Cavanaugh February 2006

Additional Review By Brent Cavanaugh

MegaVision Dedicated B&W-Only Medium Format Digital Camera Back

Brent Cavanaugh, (left) evaluates the MegaVision digital camera back

Comments

The MegaVision camera is unique in its capturing strictly a black and white image in a RAW format. One of the questions I wanted to answer for myself is how great the dynamic and tonal range of the back is. To try to answer this I used the camera out on a sunny early afternoon. Once outside I performed the black point calibration as instructed in the manual.

While trying to find subjects somewhat compositionally pleasing I really concentrated on scenes that had deep shadows and strong sunlit highlights and scenes in the shade with a limited tonal range. I did not use a light meter but began with the old f/16 rule of using the ISO for the shutter speed and f/16 in bright sunlight. This worked well as a starting point. I then used the OQO screen image and histogram to adjust the exposure more accurately.

In bright sunlight the screen is difficult to see without a shade. I ended up using the histogram more for exposure judgments than the preview image.

While photographing I did have some issues with the OQO going into “sleep” and “standby” mode when not being used such as moving from one location to another. I’m sure this could be turned off. In some cases the back itself would lose communication when the OQO went to sleep. I found closing the MegaVision software, unplugging the USB to the OQO and replugging it would bring it back quickly. I believe this would go away if XP was set not to go to sleep so quickly.

I brought the images back to the lab to take a look at the RAW files in Photoshop. I transferred them using a USB thumb drive. The images opened in Photoshop CS2’s RAW plug-in. The range of exposure and tone adjustments was excellent. I was also able to use the curves tool in the plug-in to do fine tuning to the images. I looked at the sharpening within the plug-in, but ended up disabling the sharpening here to have more control using the unsharp mask after processing.

The images have a very large dynamic range and with the 16 bit files would allow the user to do significant tuning to achieve the best output. I was able to keep both shadow and highlight detail in some very high dynamic range scenes.

This entrance to a mausoleum was flat in lighting, but had incredible shadow detail behind the gate. The pitted rust texture and details on the handles were amazing when enlarged.

More high contrast scenes that show details of wispy clouds in the sky and strong highlights with detail.

I photographed the wall because of the combination of symmetry and texture. It also again showed the dynamic range of the sensor by keeping detail in the sunspot on the bottom right.

These images were photographed to display the ability to capture a high contrast scene.

Conclusion (By Nicholas Hellmuth)

We have a long way to go in evaluating this unique MegaVision E4 back. We would like to use it in a museum setting and also to photography Maya pyramids, temples, palaces, and sacred ballcourts to test its capabilities in archaeology, art history, and architectural history.

If it becomes possible to have the back for a longer period, we would be interested in creating a User's Manual for the back, and a FAQ page for using the OQO computer.

Then we need to evaluate software workflow in handling the photos that we have taken, and hope to take in the future.

Thank You

FLAAR would like to thank Ken Boydston and Richard Chang for providing the MegaVision E4 Camera for evaluation.

I also thank Sonya Ives for volunteering to assist shooting in the stairwell and on several frozen days and the night shooting as well.

I thank Brent Cavanaugh for taking his time to take the camera out for a trial run. I believe both felt like they had handled a unique digital opportunity.

We thank **Westcott** for providing the Spiderlites. You can learn more about this product and more at:

www.FJWestcott.com

You can also contact them directly at:

E-Mail : info@fjwestcott.com

Address: The F.J. Westcott Company
1447 N. Summit St.
(PO Box 1596)
Toledo, OH 43604

Phone: 1-800-886-1689

You can obtain further information on **MegaVision** and their products by visiting their website at:

www.mega-vision.com

E-Mail: info@mega-vision.com

Address: MegaVision, Inc.
P.O. Box 60158
Santa Barbara, CA 93160

Phone: 1-888-324-2580

Fax: 1-805-683-6690

For specific information on the dedicated black-and-white system, contact the person who knows the digital system inside out.

Richard Chang

E-Mail: richardchang@verizon.net

Report first issued February, 2006.