PANORAMA

the Magazine of Panoramic Imaging

INTERNATIONAL ASSOCIATION OF PANORAMIC PHOTOGRAPHERS

IAPP

Winter 2002
Volume 19, Number 4

- Large Format Panoramic
- Chemistry
- Assessories
- Bags & Cases
- Tripods
- Printers & Paper
- Lighting Equipment
- World Wide Shipping
- Secure Online Ordering

We offer many quality camera products and accessories from.....

Linhof Technorama
Ideal panorama & vertical shot-camera for extreme views in landscape, architecture, industry & creative imaging.

Roundshot
Smaller excellent sport and reporting camera, even without tripod.
Starting at $2395.
(Lens not included in price)

All Major Credit Cards Accepted

Fuji Panorama GX617.
Excellent for outdoor photography or indoor studio work.

Gilde -Multifunctional Panorama . **for 120 film & five formats. A masterpiece of precision available in three models.**

NOBLEX **cameras use the principle of a lens rotating 360° for one exposure.**

K.B.Canham Large Format
Panorama 4x10 Walnut/ 6061 t6 aluminum hard black anodized.

Hassleblad 905 SWC
38mm lens & Viewfinder. Ultimate super wide angle camera for all around architectural landscape & industrial photography.

Badger Graphic Sales Inc.
1225 Delanglade Street P.O.Box 46 , Kaukauna ,Wis.
Phone:920.766.9332 Fax:920.766.3081 Phone:800.558.5350 Fax:800.818.3081
website: www.badgergraphic.com

In This Issue

04 President's Message

04 A Call To All Members
By Peter Lorber

04 IAPP Member of the Year:
D. John McCarthy

05 REPORT: IAPP International Convention

07 Print Competition Results

07 New Members

07 Meet Our President:
Ron Klein

08 Making a Panorama by Photomontage
By Robert Feinman

10 The Online Exhibit
Taking the long View

11 Panoramic Workshop

12 Creating Spherical Panoramas for Print
By Jook Leung

14 St. Helena - 1st Place Architecture
2002 International Convention
By Will Landon

15 I'm In Love With Annie Morphic
By Paul Pasquarello

16 Discussion of Digital Panorama Cameras
By Hellmuth Newton

20 Nevada Wide: Panoramic Photography of the Silver State

22 Sandison Exhibit Takes the Wider View

23 Things Panoramic from the Photographic History Collection

24 Buy, Sell and Trade
Classified Ads for Members

24 Self-Publiching Your Own Photo Book
By Peter E. Randall

26 IAPP 2003 Membership Form

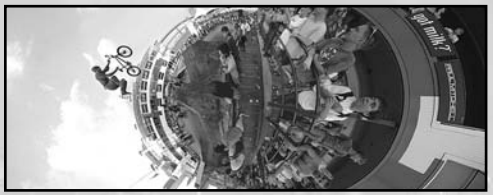
REPORT: IAPP International Convention

Page 05

Making a Panorama by Photomontage

Page 08

Creating Spherical Panoramas for Print



Page 12

I'm In Love With Annie Morphic

Page 15

Nevada Wide

Page 20

Things Panoramic

Page 23

Panorama is the official publication of the International Association of Panoramic Photographers.

Submissions for *Panorama* must be sent to:
IAPP / Richard Schneider
Panorama Magazine Editor
P.O. Box 6550,
Ellicott City, Maryland, 21042, USA
editor@panphoto.com

President: **Ron Klein**
panorama@gci.net

President Elect: **Richard Schneider**
editor@panphoto.com

Sec./Treas.: **Fran Stetina**
IAPPsecretary@panphoto.com

Panorama Publisher: **Warren Wight**
warren@wordsandpictures.com

Directors:
Stephen Delroy
stephen.delroy@gsa.gov
Ron Karabaich
karabaichr@nventure.com
H. Cary Moore
fmandcm@aol.com
Alan Zinn
azinn@netbox.com

ISSN #1090-994X

Original written articles and supporting materials, such as photographs or image files, shall be submitted to the Panorama editor for consideration. Articles may be edited and may or may not be published at the discretion of the editor. Submissions will be returned only if a self-addressed stamped envelope has been provided. IAPP is not responsible for any loss or damage to the original materials that might occur during handling or while in transit.

Articles and supporting materials are for one-time use unless other arrangements have been made between the creator(s) of the text and images and IAPP. The author / photographer retains full credit and copyright to their submissions in an edited or unedited form.

Color proofs are prefered with digital submissions. If one is not provided, we will do our best to correct the image but can't be held responsible for color and density differences from the original.

President's Message

The Future of IAPP

By Ron Klein

WOW, what happened? I'm setting in this room minding my own business and WHAM the next thing I know I'm the president of IAPP.

Seriously, in assuming the presidency, it is my strong desire that we can see our organization grow and gain the recognition that it deserves. Although not attending every meeting of our association, I have been involved since the beginning in 1984. I hope that we can continue with the energy and enthusiasm of that very first gathering.

We are rapidly approaching our twentieth year as an association. This is truly an accomplishment on its own. We need to leverage this achievement into attracting more interest in IAPP. Our organization needs new members in order to survive and be notable.

To me it seems odd that the current membership levels are low considering how the subject of panoramic photography seems to be quite in vogue today. Quite frankly we have a lot of talent that needs proper exposure to the world.

It is pretty hard not to see a panoramic image in your favorite magazine, or note an exhibition of panoramic work by some famous artist. It is important that we attract the people creating all this new work and get them to join if they are not members already.

Imagine, if you can, our next convention filled with the excitement and interest of new members. Not only do we, as old geezers, get to pass the torch to a younger crowd, but as well, we can learn some new tricks ourselves. This is a party I look forward to attending.

But in the meantime, let's get on with the business of business. It isn't hard to see we need a membership drive. Working with the new board, I hope we can get something rolling.

A website upgrade is happening, and possibly brochures touting the benefits of becoming a member of the association. As well I believe we need to offer the current members something new. Write and tell me what you want to see accomplished.

If you are interested in helping, I will absolutely jump at your input. We need all the help that can be gathered. Even simple suggestions will be given my full attention. Feel free to contact me at any time, if not about panoramic photography, how about a fishing trip to Alaska? You are always welcome.

Enjoy the holidays,

Ron Klein / your new president

A Call To All Members

By Peter Lorber

Photography as we know it is changing daily. Digital is here and the IAPP is moving along with it. The convention in Shepherdstown highlighted digital as the direction many of our members are taking. Now is the time for us to diversify by encouraging others interested in panoramics and digital to join and contribute.

I am hereby calling on all the membership to sign up one new member throughout the year. Not only would the IAPP gain a new member, but the contributions that new member can make. In addition, these same new members will benefit from being part of the IAPP family.

IAPP Member of the Year

D. John McCarthy

By Addie Lorber

Those of us who have been IAPP members know John McCarthy and the active roll he has always taken. John has been a member for some time, served as a member of the Board and has, through Fuji Photo, been a sponsor at most of our conventions. This year in Shepherdstown, John went even further by arranging and sponsoring 2 dynamic speakers, Art Rainville and Nick Meers. He also made sure we would have the Fuji award for the best in show picture.

In addition to Shepherdstown, John arranged a conference in Italy for the second year in a row. He also helped the O'Malleys and Jan Burg plan the Boston conference.

John has always been available to the IAPP members for any advice regarding film and equipment. Even though he represents Fuji Photo, you can always count on John for professional and objective advice.

I cannot think of one member who deserves this award more than John McCarthy.

Congratulations John.

REPORT: IAPP International Convention

Shepherdstown, West Virginia

The International Convention held in Shepherdstown, West Virginia was not the biggest convention ever held, but was probably one of the most successful in terms of presentations. The speakers varied in topics ranging from historic panoramas to the avante guard; and each presenter spoke to a full house. If I had to summarize the information into one sentence it would be that digital is here in a big way, and film is far from over.

Tuesday evening, October 8th, the College in Shepherdstown honored the IAPP with an exhibit of prints sent in by the membership. There was a small reception where the IAPP attendees were invited and students and faculty also came in. Richard worked with the people at the college to make the exhibit happen. David Orbock donated his time and expertise to mount and matte many of the prints; and gave a brief explanation about panoramic photography. He also set up a few different panoramic cameras to add a more visual presence to the art of panoramic photography. The faculty and staff of the college were literally "blown away".

On Wednesday, Will Landon gave a multimedia photographic presentation as only Will can do, bringing in the old and the new. Of course, Pat narrated which added more realism to the photo story.

The new IAPP Board of Directors. From Left to Right: ***Fran Stetina*** *– Secretary/Treasurer,* ***Richard Schneider*** *– President-elect,* ***H. Cary Moore*** *– Director,* ***Ron Klein*** *– President,* ***Stephen Delroy*** *– Director,* ***Alan Zinn*** *– Director,* ***Peter Lorber*** *– Chairman (Past-President),* ***Ron Karabaich*** *– Director. Photo By David Hittle*

Also on Wednesday we went from interesting topics concerning producing handmade cameras by Alan Zinn to publishing a photo book by Peter Randall to the more creative side of photography. Jook Leung's presentation concentrated on spherical panoramas that really added a new dimension to panoramic photography. In addition, Jook won first prize in the people category of the print competition, and he won the Fuji Masterpiece Award for being best in show.

Paul Pasquarello's presentation entitled Anamorphic 3-D Photography offered the 3-D view of photography. Everyone had fun with the 3-D glasses Paul provided.

Thursday was really packed with creative and informative presentations. Phil Michel with the Library of Congress gave us historic panoramas and digital imaging. No one really wanted this to end, as the images were just amazing. Phil explained a little how the images were digitized. Later in the day, Doug Segal presented his digitally archived collection of Fred Schultz. It is always a pleasure listening to Doug who is both articulate and very enthusiastic about his subject matter. Both of these presentations lent credence to the value of digital files for the purpose of archiving priceless and historic images.

Here I have to stop and really thank, on behalf of all members and attendees, John McCarthy and Fuji. John has always been a strong supporter of the IAPP, but this year he went above and beyond the usual. It was our pleasure to announce that John was unanimously chosen Member of the Year.

Not only did Fuji, through John, sponsor one of our breaks, but they also brought in 2 speakers. One was Nick Meers who journeyed from England to speak on panoramic photographers publications. The other was Art Rainville, our featured speaker. At first you wonder what Art has to do with panoramic photography, but then

more on page Six

The Official Group Shot of the 2002 International Convention by Peter Lorber.

REPORT: IAPP International Convention

from page Five

you begin to understand. Art hit home by reiterating values to keep us interested in our art and creativity without getting burned out. Not only that, he gave us the inspiration to go after the work we want and never give up. It was all done with humor and sincerity. As I looked around the packed room, I could see emotions from laughter to tears.

The remainder of our Thursday speakers concentrated on digital imaging. Dr. Nicholas Hellmuth spoke on digital panorama systems. Andrew Davidhazy, whose very informative articles we have read over the years, spoke on improvised digital panoramic cameras.

Friday was our last day for speakers but again; it was jammed with informative and interesting presentations. Carl Heilman and Jan Faul spoke on digital imaging with Photoshop and digital printing techniques. Both highlighted their interesting work. George Pearl gave us an insight into how Chinese do business with his story behind the Widepan. The most poignant speaker was Stephen Delroy whose pictorial of the aftermath of 9/11 really hit home with the enormity of the events.

Alan Kafton organized a panel around digital scanning techniques. This was of special interest to everyone with any inkling of getting into digital imaging while still using film. It was informative and gave attendees the opportunity to pick many brains and have questions answered.

Alan Bank gave us an update on the Fowler Foundation and we all appreciate the contributions made by our members. We plan to put the funds to excellent use in the future.

The trade show was well attended each evening. Our vendors included Charette with Epson printers, Scanvec Amiable with their Photo Print family RIP programs, GW Moulding with their beautiful frames, Imacon scanners, Kaidan, David Orbock, Will Landon, George Pearl with Widepan, Peter Lorber with Roundshot, Jan Faul, John McCarthy with Fuji, and B&H Photo and Video who also sponsored one of our breaks.

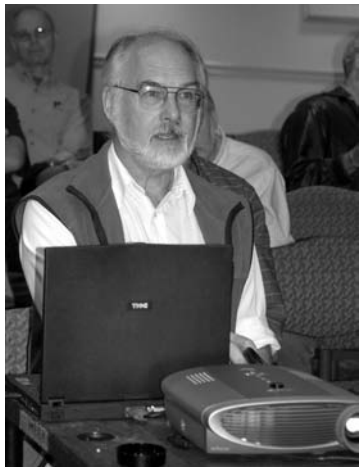
A special thank you goes to Carlos and Humberto Chavez. Not only were they one of our vendors, but they also generously donated all the plaques for our photo contest, to out-going president Peter Lorber and member of the year John McCarthy.

Spouses went to lunch at the wonderful Bavarian Inn on Thursday, right after the group photo. There were 16 of us attending and we had a wonderful time. On Saturday the group taking the tour bus to Gettysburg enjoyed themselves tremendously. A special thanks goes to Benjamin Porter for organizing the excursion and to Alan and Marilyn Bank for acting as chaperones.

Congratulations to our new officers and board members. They are:
President: Ron Klein
Pres Elect: Richard Schneider
Secy/Treas: Fran Statina
Board Members: Stephen Delroy, Ron Karabaich, Cary Moore and Alan Zinn

On a final note, thank you to our outgoing officers and board members. They did a wonderful job leading our organization and planning the convention.

Panel with some of the submissions for the Print Competition. Photo by David Hittle.



Andrew Davidhazy from R.I.T. during his lecture. Photo by David Hittle.

Nicholas Hellmuth from Bowling Green State Univ. during his lecture. Photo by David Hittle.

Handing of the gavel from President Peter Lorber to incoming President Ron Klein. Photo by David Hittle.

Past-President Fred Yake presenting 1st Place in Landscape/Pictorial Panoramic Photography award to Alan Kafton. Photo by David Hittle.

Past-President Chet Hanchett (left) and lecturer Nick Meers (right). Photo By Peter Randall

Print Competition Results

Judges: Jeff Weisenburger, Marie Bristol, Bill McBride and Phil Stelling. Chet Hanchet broke the tie for the Fuji award.

Abstract:
1st - Jook Leung
2nd - Peter Lorber

Landscape:
1st - Alan Kafton
2nd - Jean Yake
3rd - Peter Lorber

People:
1st - Jook Leung
2nd - Robert Kippenberger
3rd - Alan Kafton

Architecture:
1st - Will Landon
2nd - Peter Lorber
3rd -David Orbock

Fuji Award - Jook Leung

New & Returning Members

David Benhoff
Secretary, Maryland
Leo Eger
Titusville, New Jersey
Robert Feinman
Great Neck, New York
Gerald Hanscamp Jr.
Belgrave, Victoria, Australia
Joe Jacobson
Lockport, Illinois (returning)
Morrell Ours
Seabrook, Maryland
Allen Thomas
Houston, Texas

Meet Our President

Ron Klein

Born - Eureka California March 2, 1948
Married – Judy
Children – Julia age 22, Peter age 20
Residence 1208 Pike Court
Juneau, Alaska 99801

Grew up in Northern California, I majored in fine art photography at Humboldt State University.

After spending several summers in Alaska, I permanently moved there in 1975 and began my own business "Northlight Photography" the same year.

Northlight Photography specializes in art photography (panoramic), and conservation printing and preservation of historic photos for the Alaska State library and museum. Our most recent project is to create a major exhibition of photography by two Alaskan pioneer photographers. Over 2,000 glass plate images are being archived from their work.

I began panoramic photography in 1978 with the purchase of first #10 cirkut camera. My collection includes on example of all the cirkut sizes including the largest, a 22 inch monster used by a pioneer photographer in Alaska, and many other vintage panoramic cameras.

1986, invited to China to have a one man exhibition of panoramic images shot with the cirkut camera. Backpacked 50 pounds of cirkut gear, spent over a month shooting in China hosted by the Chinese government.

Assembling a mobile darkroom to process cirkut film and prints on the spot, I traveled through the American west in 1989 - 90. Images include cattle drives and Indian groups as well as scenic views from redwoods to Yosemite and the goosenecks in Utah.

Again lugging #10 cirkut camera, in 1992 I traveled extensively through Russia with Russian photographer, Volodia Sertoon. From Magadan in the Russian Far East to St. Petersburg and back to Vladivostok we spent over two months in Russian and never once stayed in a hotel, every night was in the home of a newly met Russian family.

Our new president, Ron Klein, showing that bigger really is better, presenting his extremely large 22" Cirkut camera at the 2001 IAPP International Convention in Napa, CA. Past-President Liz Hymans lends a hand, helping Ron move the camera.

The bulk of my present work is panoramic group photos like Alaskan natives in colorful costume, an event held every two years with thousands of participants. As well my work includes producing murals for museum displays and almost any odd photo job that seems interesting. Living in a small town in Alaska somehow demands that you be more creative than normal. Just remember, there are no roads to Juneau Alaska, you have to arrive by ship or air.

Other accomplishments:
I love restoring antique cars, my current project is a 1929 Model A Ford phaeton with an insane idea to drive it around the world in the very near future.

For years I operated a 24 foot steam launch in Alaska with a wood fired boiler and a V-compound steam engine machined by myself.

Self taught machinist with a complete shop. I have a lathe, milling machine, and other specialized equipment that are used to make camera parts like gears and other missing items.

Current interests besides following the digital revolution:

I have made a 180 degree turn and taken an interest in early collodion wet plate photography with a goal to make glass plate panoramic images in the near future.

Making a Panorama by Photomontage

Robert Feinman

I was walking down one of the picturesque side streets in New Orleans' French Quarter last year and was taking pictures of some of the distinctive houses. Since the streets are so narrow my Noblex 35 did not capture enough vertically so I was using my Pentax 67 with a 45mm lens.

On one particular street all the houses seemed interesting so without too much thought I stopped in front of each one and took a picture. Conditions were not ideal since I was shooting against the sun and in order to prevent too much flare I moved so as to block the direct sun behind some part of the building for each one. Even so there is flare in almost every image. In addition I needed to tilt the camera upwards so as not too cut off the tops of the buildings. I ended up with six pictures, each with exposure and perspective problems.

The unedited images can be seen in Figures 1a to 1f, below.

Figure 1a - 1f
There are several problems apparent. First, the exposures are different for each one. I decided to pick a spot in the shadowed part of the sidewalk and try to equalize this. I picked an image and made tonal corrections in Photoshop using the curves tool. For the next image I made similar adjustments while trying to bring the values in the sidewalk to match the adjacent image. Placing a color sample point at the same location in each simplifies this.

As an example, Figure 2 shows the left-most image after tonal adjustments. Notice the improvement in midtone brightness and contrast.

Figure 2

Once all the images were color balanced and matched for brightness I needed to address the second problem, perspective distortion. There are two problems here: first the building fronts are not rectangular. They narrow towards the top. Second, the buildings on either side are seen from an oblique angle. This won't match up with the adjacent image where the same building is seen from straight ahead. Images made when rotating the camera between images yields distortions caused by projecting onto an oblique plane. Several software packages will adjust this to produce stitchable pictures. In the present case the point of view changes in each image and none of the existing programs can cope. I decided to fix the perspective and to minimize the overlap problems by seaming at the doorways between the buildings. Figure 3 shows number 5, one of the worst images after being straightened.

Figure 3

The next step was to combine all the images onto one master image. I increased the canvas size of the first image by 500% horizontally and 150% vertically. I then dragged each of the other five images onto this one and shifted them rightward towards their approximate positions. Next I added a mask to layers 1 to 5. The mask layer will be painted on to blend the adjacent images. The layers palette now looked like this (figure 4 below).

Figure 4

Figure 5

Revealing pairs of images at a time I reduced the opacity of the top image to about 60% temporarily, and then moved it so that the doorways overlapped as best as possible. Then using a fairly large brush with soft edges I painted on the mask to selectively reveal the lower image. By setting the brush opacity and flow it is possible to cover or blend the two images where they overlap. Figure 5 above shows the palette with editing on the masks in place and figure 6 (next page) shows the image at this stage of the editing process.

Final steps included some additional edge cleanup and tonal adjustments and cloning in some parts of the sidewalk where the blend was too bad. If you look at the original images and the composite you can see that the sky is bright behind each building and shades

Figure 1a

Figure 1b

Figure 1c

Figure 1d

Figure 1e

Figure 1f

off to blue on either side. I decided that it was too much work to try and fix this. There were problems with the rooflines as well. So I selected the sky area and filled it with a gradient blue sky. If you look at the completed image you will see that I didn't attempt to make this perfect either and some of the tones in the branches don't match up. Last step was to crop to size and flatten the image to a single layer.

At the resolution I chose, the final image is about 8 by 56 inches when printed on an inkjet printer at 300dpi. Since this project was an after thought I didn't attempt to make a perfect montage, but left some of the "seams" showing to indicate that the view is an impossible one anyway. Not everything has to be "photorealistic". The final effort is show here and can also be viewed online at my web site in a larger version.

Robert Feinman is a retired physicist who now spends too much money on photography. He lives on Long Island. Samples of other pictures and Photoshop tips can be found on his web site: http://robertdfeinman.com

Left: Figure 6; Below: Finished image

FULL CIRCLE PHOTO LAB

Now Offering E-6, C-41 and B&W Film Processing

Full Circle uses the Ilfochrome (formerly Cibachrome) process for prints from transparencies and the Fuji Crystal Archive process for prints from negatives

Proofing and printing services available for all film sizes

35mm 2 1/4 x-pan 617 4x5 8x10 cirkut

Full Circle Ltd. 1.888.844.4619 www.fullcirclephoto.com

DIGITAL GLOBETROTTING BECOMES YOUR VIRTUAL REALITY!

Over 60,000 360 Degree Panoramic Images Representing over 100 Countries on 7 Continents Available for Licensing For:

· Print Media · Web Banners

· 360° Virtual Reality Tours

Visit Our Website and Search the Complete Collection:

www.everent.com/360

Everen T. Brown

three sixty 360° images™

Available for Assignment!

376 South West Temple Salt Lake City, UT 84101

Phone: (801) 364-2642 · Fax: (801) 364-2646

Panoramic Photographs at the Library of Congress:

The On-line Exhibit

By Phil Michel
Special to Panorama Magazine
Taking the Long View: Panoramic Photographs, 1851-1991

The Library of Congress' Panoramic Photograph Collection contains approximately four thousand images featuring American cityscapes, landscapes, and group portraits. These panoramas offer an overview of the nation, its enterprises and its interests, with a focus on the start of the twentieth century when the panoramic photo format was at the height of its popularity. Subject strengths include: agricultural life; beauty contests; disasters; engineering work such as bridges, canals and dams; fairs and expositions; military and naval activities, especially during World War I; the oil industry; schools and college campuses, sports, and transportation. The images date from 1851 to 1991 and depict scenes in all fifty states and the District of Columbia. More than twenty foreign countries and a few U.S. territories are also represented. These panoramas average between twenty-eight inches and six feet in length, with an average width of ten inches. The Library of Congress' large collection of panoramas was formed mainly during the late nineteenth and early twentieth centuries, when many photographers submitted copies of their works to the Library for copyright protection. More than four hundred photographers are represented in the collection. In order to faithfully reflect the wide variety of photographic processes represented in the collection, the digital images were copied in color. Mounted panoramas were filmed to show the entire mount. Decades ago, the Library cut many of its panoramas in two or more sections and mounted them on linen in order to fold the images and store them in boxes. These vertical fold-lines can be seen in the digital reproductions.

The collection is available for searching and viewing at the Library's American Memory web site. The home page for the Panoramic Photographs Collection is http://memory.loc.gov/ammem/pnhtml/pnhome.html

The Digitization Process

The collection was selected as a high priority-processing project by the Prints & Photographs Division in the 1980s. In support of the Library's American Memory pilot project, the panoramas were selected for electronic imaging, initially for videodisc and CD-ROM distribution.

For the initial capture and scanning, the panoramic photographs were digitized from 35mm film produced by a contractor in 1992-93 using a modified motion picture camera. The full-frame 35 mm exposures were made on color motion picture film stock. The contractor, Stokes Imaging, Inc., constructed a computer-controlled table that moved the panorama under the camera, producing a sequence of exposures that represent overlapping segments of the

original photograph. The computer program tracked the number of segments and the amount of overlap to permit the "reassembly" of the panorama in digital post-processing, where match lines were identified for each segment, the overlap cropped away, and the segments blended. The digital images were created at a resolution appropriate for video production, e.g., the individual segments were scanned at 560x480 pixels. In 1993, the resulting digital images (both the assembled whole views and all of the individual segments) were converted to analog video and copied to videodisc media.

As digital imaging technology and the World Wide Web emerged, the Library launched its' National Digital Library Program project. Many of the previous videodisc collections were repurposed for distribution online. In 1996, the 35mm copy film produced for the first videodisc was rescanned by another contractor, JJT, Inc., of Austin, Texas. Once again, the images for each segment were captured from the film in a computer-controlled process that tracked the information needed for later assembly, with a base capture resolution of about 1000x700 pixels. Once again, the frames were assembled, this time to produce an archival or master digital image of the panoramic photograph. All other images used in the display (e.g., the thumbnail reference image) are derived from this master image. The master image is available for download as an "uncompressed archival tiff."

Minimal computer enhancements were applied to the archival image during the production process. In contrast, the enhancement called sharpening has been applied to the reference image and, as a result, it may look better in some display settings than the archival master. The header of the master image indicates that the file carries a resolution of 900 dots per inch (dpi). This represents the approximate resolution of the scanning of the 35mm intermediate copy film. The resolution as related to the size of the original prints ranges from approximately 50 to 100 dpi. The dimensions of each original panorama can be found in the bibliographic record in the MEDIUM field.

Phil Michel is a digital conversion coordinator in the Prints and Photographs Division of the Library of Congress. He presented this information at the 2002 International Convention.

Panoramic Workshop

Picture Provence Tours is pleased to announce a new workshop in Panoramic Photography.The workshop is designed for all levels of panoramic photographers. Beginners will get acquainted with the various tools needed to acquire panoramic images and introduced to the experience of constantly evaluating and monitoring the extended image field. Intermediate and advanced photographers will hone their artistic skills by exploring the interaction between film, camera, light, moving objects, etc. The participants will also be introduced to the various tools used to scan, stitch, correct and print the images. Both groups will use the spectacular natural landscape and the charming villages of Provence to capture images of nature, people, and objects. The film will be processed at a local lab and critiqued by the group to ensure continual improvement. As with all study groups much will be learned from other group participants as well as the instructors.

The instructors are David Orbock, a fine art panoramic photographer who uses a Fuji GX617 and a Hulcherama 360 deg panoramic camera, and Fran Stetina, who uses a Roundshot 60mm camera and Fuji S2 digital camera to produce his images. Both instructors are members of the International Association of Panoramic Photographers.

For more information on Picture Provence tours, including prices, accomodations and travel arrangements, visit **www.pictureprovence.com**.

Entitled "Playing Boules in Cassis" Dave Orbock created this street scene panorama in Provense.

Using the panoramic view of Gordes as a background, Dave Orbock created this panoramic image of a local Provense artist.

Creating Spherical Panoramas for Print

By Jook Leung

Presented at the: IAPP-WV International Convention on October 9, 2002

My presentation was about my experiences in using the fisheye lens for creating spherical panoramas and methods to showcase them as gallery prints. The response from attendees was fabulous as I came away with the Best in Show, First Place in People and First Place in Abstract print awards.

Photo of Jook Leung by Ted Thomas.

I have been shooting and creating virtual tours that are viewed electronically on computers over the Internet for several years now. It first started with QuickTime VR where many photographers found tools where they can stitch a series of images together into a seamless 360 degree panorama.

This fascinating technology diverted my commercial photography career into 360° panoramic photography. My first serious panorama camera was the Seitz Roundshot 220VR. Soon after came the Nikon Coolpix digital camera with its 180° fisheye adapter that was used for iPIX style virtual tours.

This camera (CoolPix 990) has allowed me to train myself to shoot spherical VR's in crowded spaces unencumbered by camera rigs.

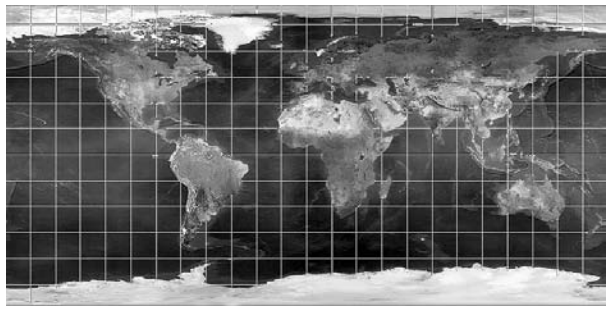
It has become for me a natural way of shooting, enabling capture of the whole environment quickly before a fleeing moment is gone. Now I use the Nikkor 8mm/2.8 fisheye lenses with the Fujifilm S1 and S2 digital SLRs for the exceptional quality that this setup provides. For viewing spherical panoramas over the Internet I now use QuickTime's CubicVR or Panorama Tools' Java based PTViewer.

On this Web page I have photos of the panoramic equipment I use - http://360vr.com/pages/tools.html. In my earlier days as a photography student, I had experimented with the fisheye lens finding them both fascinating and odd. Now I use them professionally because they continue to give me the fascination and Wow factor.

Instead of stepping back to capture a scene with conventional wide-angle lenses, shooting with a fisheye lens means getting into the middle of a scene because everything around you will be apart of your picture. This is a considerable challenge and burden on the photographer to compose the image and demands a lot of previsualization to come up with good results.

I consider the full spherical 360° panorama the ultimate image format. It is now easily viewed and interactively explored on a computer screen and delivered over the Internet. Perspective is corrected in real time as the viewer moves around or changes his angle of view.

For print presentation and display, I have explored some methods. Remember with spherical panoramas, there can be infinite points of view the photographer can extract for his audience. What this means is, not only can I slide or shift the image left and right to change my composition, I can now also tilt or roll and zoom in or out my viewpoint too! This gives ability to derive fascinating points of view from the same source image.



Mercator projection of the surface of Earth

Equirectangular photo of Library of Congress - Jefferson building Great Hall

I showed examples of this using software for Adobe Photoshop, Helmut Dersch's Panorama Tools and Flaming Pear's Flexify.

The spherical scene information is stored in the Psphere or Equirectangular format. Much like how the surface of the Earth is projected onto to a flat surface in a Mercator projection (above). Note the large distortions at the poles where the zenith and Nadir points are now stretched out across the top and bottom as a line. Showing this image as a print is not always pleasing to the eye.

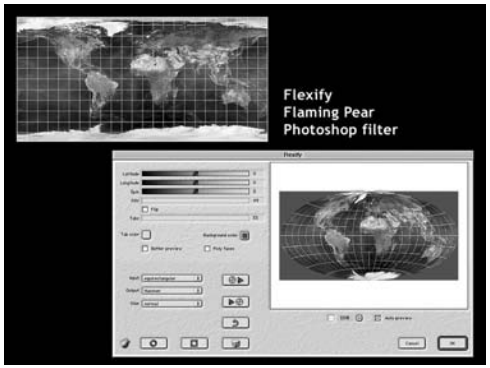
The 4pi photo of Library of Congress - Jefferson building Great Hall (next page) is an oval shaped projection, commonly called a Hammer projection. It is also referred to as a 4Pi Steradian image. Just as there are 360 degrees or 2pi radians in a circle, there are 4pi Steradians in a sphere so this means that everything in all directions is visible: front, back, left, right, up, down).

(I discussed the transformation of equirectangular to 4Pi Steradian using Panorama Tools software in an earlier article for IAPP's Panorama Magazine – Spring 2002 issue)

This method of projection is called Hyperbolic and is currently my favorite: The hyperbolic space can be described as an infinite space projected onto a finite volume of space.

To see some more Hyperbolic examples shown by Jook at the 2002 International Convention turn to page 14.

The views on page 14 are derived using a Photoshop plug-in from Flaming Pear Software called Flexify, which also does lots of other projections including Hammer.



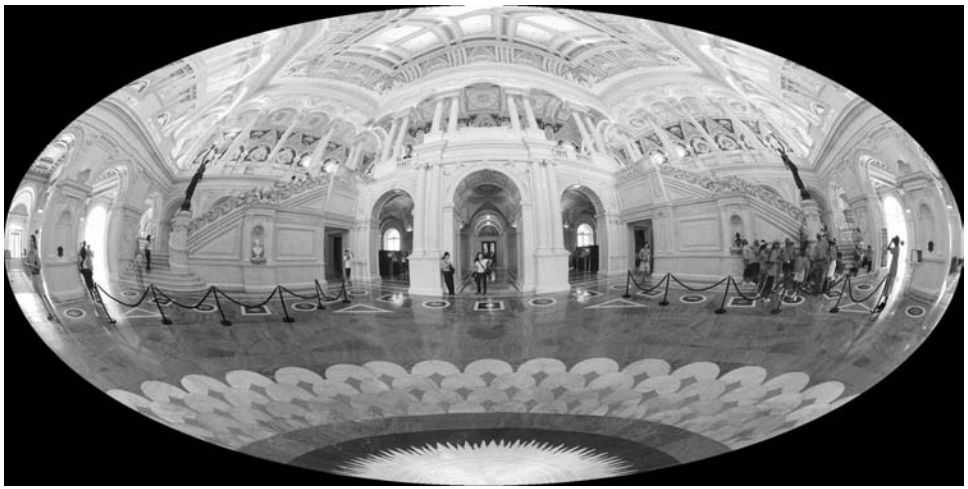
What I did not have time to explain was the art of shooting and creating the full spherical equirectangular image. A topic I'll leave for next time.

Resources and urls for further information can be found on my website at:
http://360vr.com/pages/resources.html
http://360vr.com/pages/oil check.html

Jook Leung a commercial photographer based in Englewoood, NJ. He has a background in Photocomposition and Digital photo-illustration. Jook is excited to make 360° panoramic images his new playground and has done so for the last 5 years.

Jook's favorite 360VR images are visually vivid and uniquely conceptual. His strong sense for color, lighting and composition are naturally bound to sneak into his panoramic work.

360VR Studio's website is 360vr.com and Jook can be reached at jook@360vr.com.



Top: A 4pi photo of Library of Congress - Jefferson building Great Hall.

Bottom: Hyperbolic photo of Library of Congress - Jefferson building Great Hall

The official address for all IAPP business - including membership renewals - is now:
IAPP
P.O. Box 1340
Bowie, Maryland 20718 USA

Submissions to Panorama Magazine will remain:
Richard Schneider - Panorama Editor
P.O. Box 6550
Ellicott City, Maryland 21042 USA

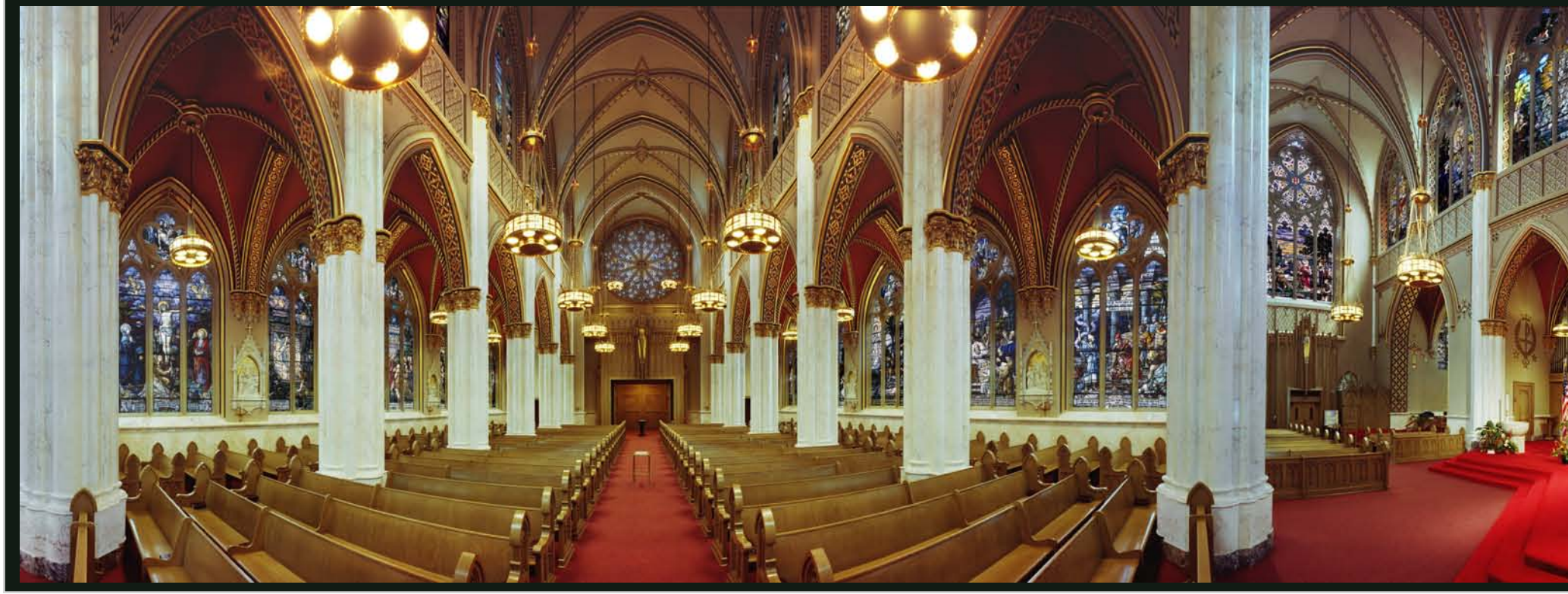
More Hyperbolic Panoramas

By Jook Leung

Photo atop Flagstaff Mountain in Boulder, CO

Photo of BMX Core Tour at Pier 17, NYC

This beautiful Will Landon panorama entitled "St. Helena" took first place in the Architecture category at our print competition.



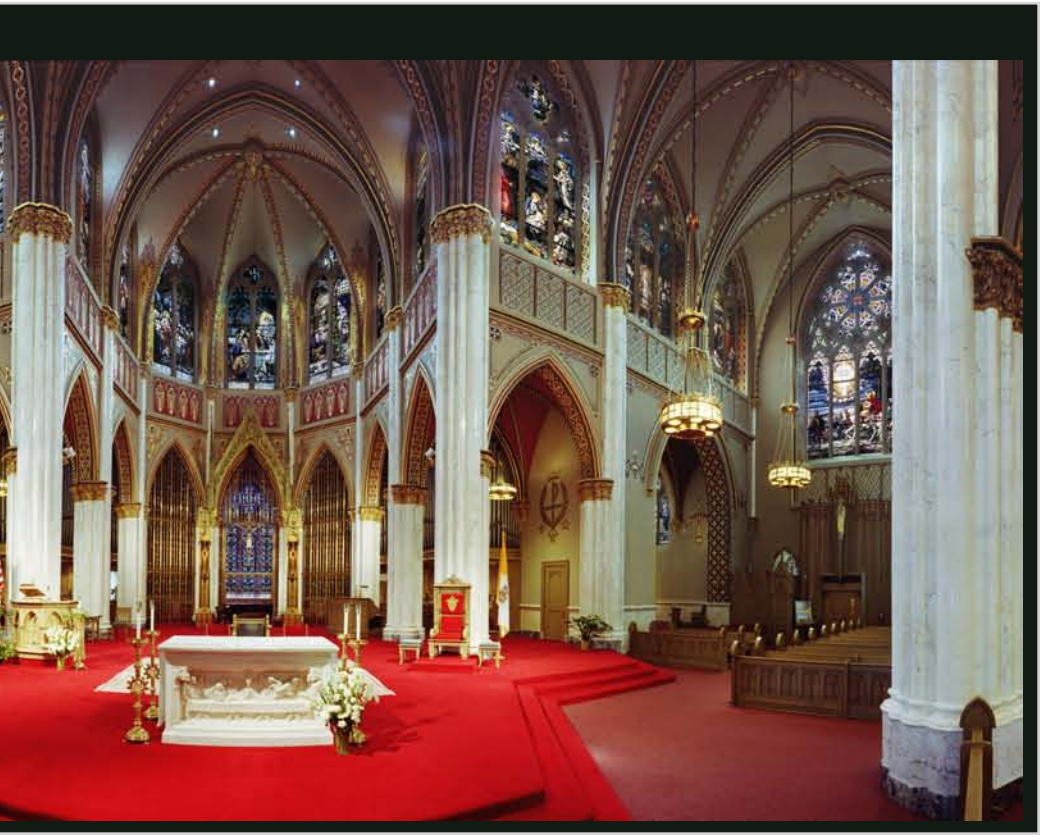
My Two New Best Friends or

I'm In Love With Annie Morphic

By Paul Pasquarello

The above was the original title of a slide presentation by Paul Pasquarello, illustrating the simultanious use of two cameras, respectively equipped with anamorphic lenses.

Paul has been a photographer for the past 40 years. He began as a Fine Art photographer in college, became a photojournalist after graduation, and continued as a staff news photographer for the next twenty years. An untimely folding of his newspaper propelled Paul into a busy feelance career, specializing in airial photography and table top catalog work, along with stringing for several magazines. In 1986, an unexpected interesting opportunity presented itself, prompting Paul to make another occupational change to assume the directorship of the Photographic Department of the New York Power Authority.



Paul shared with the audience that he has always been a panoramic photographer; When colleges were purchasing baseball bat size telephoto lenses, he was experimenting with fisheye and swing-lens cameras. He went on to explain that he has always held a fascination for stereo, or 3-D photography. His particular interest in anamorphic lenses emerged from having viewed such a 3-D slide program while attending a conference of the National Stereoscopic Association several years ago.

As Paul explained, anamorphic or cinemascope lenses as they are better known, optically compress the horizontal (letter-box) image, to fit more horizontal information onto a normal 35mm slide. Later, the process is reversed and the image restored, by being projected through another anamorphic lens which uncompresses the visual information into a wide screen or cinemascope image.

more on page Sixteen

Discussion of Digital Panorama Cameras

Presented at Photokina and PhotoPlus Tradeshows, September-November 2002

This report discusses the digital panorama systems displayed at Photokina 2002 in Cologne Germany. My research institute, FLAAR, has an office in Cologne so attending Photokina is convenient. We then took notes on the digital pano systems at PhotoPlus Expo in New York, Nov 1st, 2002.

The purpose of the FLAAR program in evaluating panoramic cameras is to prepare lists of which equipment is best suited to provide enough true optical resolution to output at wide format sizes, either on Cymbolic Sciences/Durst Lambda RGB laser light digital imagers or on wide format inkjet printers. The fact that Oce now has an even larger sized Cymbolic Sciences laser light imager makes it all the more important to recognize which cameras provide enough dpi to power a printer of that size.

Laser light digital imagers require sometimes up to twice the input resolution as an inkjet print. Thus, it is crucial to find cameras that can supply that much resolution.

By their very nature panoramic photographs beg to be enlarged to mural size. This is much more easily done digitally than in a darkroom. There is only one place in the USA that can handle enlarging a pano negative over 10 inches long from film, but over 2,000 Kinkos or Sir Speedy outlets nationwide can enlarge your digital pano photograph on inkjet media. What used to require an impressive Swiss-made (hand-made), quarter million dollar darkroom enlarger to handle a pano image on film, nowadays any hobbyist can do it in their own living room or studio with an $8,000 Hewlett-Packard DesignJet 5500 at a whopping 42-inch width and up to 100 feet in length (though most pano images at 42 inches in height would be only 20 to 30 feet in length before their file size choked even a better computer system).

Although the printing is far more easily done digitally with inkjet such as on an Encad NovaJet or Hewlett-Packard DesignJet (Epson are slow for such lengths), the original pano photograph is still done more easily with a conventional camera and film. This is partially because most pano photographers already have their traditional film cameras. Digital pano systems did not become widely available until about 2001. The software and turntable of the BetterLight digital pano, the top of the line, was in beta stage until recently. The Dicomed version (1996 onwards) works just fine, as demonstrated by Stephen Johnson's National Parks project. FLAAR has used the same Dicomed version successfully for five years. Now (November 2002) the newer BetterLight pano turntable is available from BetterLight. Although BetterLight did not exhibit at Photokina, they did have a well attended booth at PhotoPlus a few weeks after Photokina.

QTVR PHOTOGRAPHY

This report discusses only those cameras which can produce enough resolution for a large format enlargement at mural size. QTVR images are rarely adequate to print at large format sizes, so we don't really discuss QTVR here. Besides, there are plenty of digital panoramic cameras that do seamless continuous panoramas, so there is no need to stitch jerry-rigged individual photos anymore. QTVR is mainly for using on the Web where low 72 dpi monitor resolution is adequate. Inkjet printers need minimum of 120 dpi, an average of 150 dpi, and laser imagers prefer 300 dpi.

We do not cover the immersive imaging systems for the same reason, they are

Panoramic by Nicholas Hellmuth of Lake Atitlan, Guatemala, September, circa 1999, copyright FLAAR. Schneider lens, probably 210mm, on 4x5 camera with Dicomed version of BetterLight tri-linear large format panorama system. Photos from this kind of camera can be enlarged to about 40" high by about 17 feet long. The newer generation of digital panorama cameras can produce even larger mural-sized enlargements. Camera courtesy of BetterLight; tripod courtesy of Ries; DesignJet printer courtesy of Hewlett-Packard.

I'm In Love With Annie Morphic

from page Fifteen

The images that Paul presented were made as he described, by using two Nikon N-90s cameras fitted with 50mm anamorphic lenses and mounted on a slider bar to maintain their alignment, while positioned with a 4 inch separation. The cameras are triggered simultaneously using a Nikon MC-23 connecting cord. The film in all photographs was Kodak Elite Chrome 100, and the slides were projected by Kodak Extra/Bright Ektagraphic projectors, onto a 6'x12' custom made silver lenticular screen.

Paul indicated that the program he was presenting was a sample culling of five separate wide screen shows, including Buffalo, New York, Oshkosh, Wisconsin, Arizona, as well as Spain and France.

mainly for use on the Internet. Nonetheless we always like anything, such as the Kaidan systems, which offer reliable competition for the unpopular IPIX system.

Because QTVR only uses 72 dpi for small sizes which are downloadable on the Internet, there is not much market, and even less bandwidth, for a virtual reality view at higher resolution.

WIDE ANGLE CAMERAS
Many people begin panoramic photography with a wide angle camera. Maybe first 28 mm, then 21 mm. I next jumped to the Nikon 15mm for doing interiors of 8th century Maya temples and palaces.

I also experimented in 6 x 12 cm rollfilm backs on a 4 x 5 inch camera. Many companies make these backs. I use those of Horseman.

I have also used 6 x 17 inch cameras such as the Linhof. There are a variety of handmade variants. One had the back portion of one camera and a front portion from another Linhof camera, the Linhof Technikardan, complete with bellows.

A German variant of these dedicated ultra-wide angle cameras is that of Dr Gilde. It is not sold in America. This camera has more gizmos and variations than any others that I know of. Somewhere I remember reading that one Gilde variation can handle up to 23 cm of film.

The Dr Gilde brochure from Photokina states that a digital back is being developed together with Rollei. Rollei makes excellent cameras but does not itself have any digital back.

However rather than digress into describing other wide angle cameras, most of which are based on traditional film and darkroom processing, I prefer to discuss the current state of digital panoramic cameras as documented at Photokina 2002 tradeshow, September 25-30 in Cologne, Germany and then at PhotoPlus.

DR CLAUSS – KARLINE DIGITAL PANORAMIC CAMERA SYSTEM
Dr. Clauss Bild- und Datentechnik GmbH has produced the Karline panoramic camera.

The CCD sensor is listed as 2 lines green and Red+Blue per 2048 pixels. If I understand that correctly it is a quad-linear CCD instead of a tri-linear CCD. Of course extra green is because the human eye sees better focus in the green channel.

Color depth is 24 bit RGB which means basic 8 bits per color, the traditional minimum.

The rotary drive offers 8,333 steps per circle. I am assuming this means the potential for 8,333 pixel rows. In comparison, the BetterLight can be set to 29,000 pixel rows or even higher, keeping in mind that Photoshop can handle only up to 30,000 pixel rows. In other words, BetterLight can produce an image of higher resolution than Photoshop can open.

Lens on the Karline is a fixed focus 13mm with vertical angle of 90 degrees.

Karline Scan software controls basic functions of the camera. There is no mention of color management though perhaps some features are in Karline Studio.

The Karline system can also be used as a rollout camera with the turntable. Step resolution is 19,991, hence considerably higher than the panoramic mode but not as flexible as the BetterLight.

At present all systems work on AC 230 V. The demo disk was listed as working only in PC with Windows, which makes it tough for us to view it with a Macintosh. Thus I am presuming the camera also operates with a PC.

Dr Clauss's system has a notable feature, the Majak panorama lighting. This would be useful indoors in a room. I do not know how far a distance the lighting will provide serious illumination, but certainly for a normal room in a house.

PANOSCAN
PanoScan was exhibited at Photokina in Germany but only in year 2000, in the PhaseOne booth. They were not present at Photokina 2002 in part because they no longer have a relationship with PhaseOne. The PanoScan would tend to be exhibited more at tradeshows devoted to its own market niches, such as law enforcement, security, car interiors, etc.

Nonetheless, PanoScan is alive and even is preparing a new camera, the MK-2. This has Kodak chip and BetterLight electronics, custom developed for VR. Is stated to have a number of advantages over Spheron, such as being faster. Outputs large rough TIF file.

The original PanoScan (the one with PhaseOne innards) was intended for police work, for interiors of buildings, to show car interiors for advertising, and other practical uses. It is a seamless version of QTVR. I saw this camera once at a German tradeshow in the PhaseOne booth.

The PanoScan web site claims "The MK-2 is up to four times faster than any digital panoramic camera in the world, with a capture rate of up to 194 million pixels per minute. This feature allows the capture of people in motion, which makes it a powerful tool for event documentation and tourism, for example." This would be a valuable feature. However FLAAR does not have one, nor have we had an opportunity to try one out.

KAMERA & SYSTEM TECHNIK GMBH, KST - EYESCAN
I have known the principal of EyeScan since first meeting him when he was manager of Noblex (panorama cameras) in Dresden. He has moved on and is now executive of a successful start-up company, Kamera & System Technik GmbH, outside Dresden.

Their booth at PMA 2002 showed an enlargement about 20 inches high by perhaps 10 to 12 feet in length. So this camera can definitely produce wide

more on page Eighteen

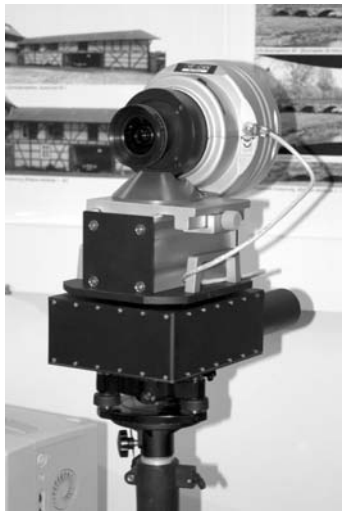
Discussion of Digital Panorama Cameras
from page Eighteen

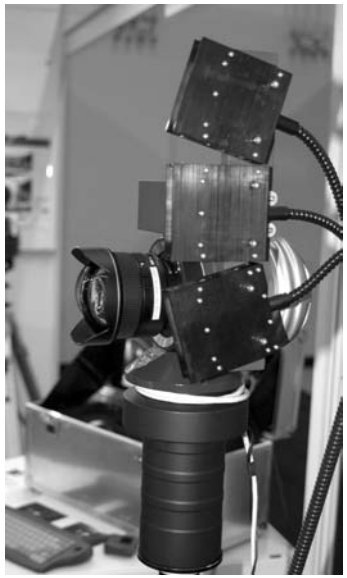
format inkjet printer output. KST exhibited at Photokina 2000 and again in 2002.

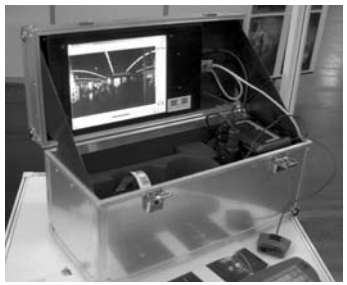
The entire system comes in a single carrying case. You remove the camera to set it up; the computer resides inside the carrying case.

The on-board computer has advantages and disadvantages. Advantage is that the entire system is self-contained. Downside is that if you keep your camera 5 years the associated computer is obsolete in two years. Foveon did not survive this difficulty with their tethered on-board computer. ePan is a digital pano system which also had a self-contained computer. Again, their system failed in the market place. KST, in distinction, is a larger German company with many partners and allies. They will unlikely fail or even wither.

The company behind EyeScan is operated by people who are both technically competent and know business reality as well. Their other products sell into the market for security cameras so the income from that subsidizes the digital pano system.







The EyeScan MM1 has a 28mm lens. The camera produces a 250-280 MB file.

KST also makes software to eliminate panoramic distortion, VHLReal. Some other pano camera companies may also make comparable software. This particular product by KST was made for the German space research institute.

KST also makes a photogrammetric camera, the EyeScan M3 metric. Costs 45,000 euros. You have to provide your own after-market photogrammetric software. This also was made in conjunction with the German Aerospace Center, so you can expect typical German technical capabilities.

One advantage of these dedicated turnkey systems is that the nodal point of the lens is precisely where it should be. If you have a system with interchangeable lens, it's tough to find the precise nodal point.

KST also has a 120 size rollfilm camera with a fixed picture angle of 125 degrees. Cameras of this sort are used to photograph groups (same as the old banquet cameras of the 19th century). FLAAR does not cover this class of camera.

EyeScan exhibited at both Photokina and PhotoPlus as well. This suggests the company is doing well.

SEITZ ROUNDSHOT
Seitz is known worldwide for high precision panorama cameras. I have the last of the versatile 70mm-220 rollfilm Super Roundshot.

Seitz now has a new digital camera, their Super Digital II. I like the fact that it accepts Leica R lenses.

It was my impression that they had a new digital camera at Photokina but if so there was no brochure that I got. Since I do not have any Seitz digital camera I am not able to comment on how it functions compared with the BetterLight.

SPHERON
The first time I saw the Spheron camera, at Photokina 1998, it was a non-functioning prototype of several graduate students from the technical university of Dresden, Germany.

Then at a subsequent trade show in Germany, Photokina 2000, the camera was functioning, though the inkjet print had terrible banding (hopefully from the Mutoh piezo printer rather than from the camera scan system).

The graduate students are now long ago graduated into the real world and their company is growing internationally. I have seen their latest version at Photokina 2002. FLAAR does not have their model so we are unable to comment further on it other than to say that its file size is larger than several of the other systems such as ePan. I would estimate that the BetterLight has the largest file size of all, so that's the best for reproducing at mural size with large format inkjet printers.

The original camera was the Spheron PanoCam. As is typical with a turnkey system, the camera itself has few controls; everything is in the software.

The SperoCam operates with a fisheye lens.

The SpheroCam HDR, gives a high dynamic range of 26 f-stops. In a few respects you could tweak these yourself with Adobe Photoshop if your original image was good. But the Spheron software allows it to be done semi-automatically.

Since Spheron is a German company with its own software engineers, it is no surprise that they have additional imaging software features.

The Spheron brochure is by far the most sophisticated of any of the camera companies.

DICOMED
Dicomed re-packaged early versions of the BetterLight, vintage 1996-1998. Approximately four panoramic turntables were made. Stephen Johnson is the best known photographer to have one. FLAAR also has this model,

indeed this is the camera we have used to photograph:
• Lake Atitlan in Guatemala
• Antigua Spanish colonial architecture
• Farm fields in the Ozarks
• Lakes and house scenes in the Ozarks
• Streams in the Ozarks

BETTERLIGHT
The BetterLight is the first digital pano system to be developed (circa 1995, used by Stephen Johnson for his National Parks project). It has taken seven years to bring the system to market. The Pano/WideView turntable, software, and system are now available. FLAAR has been a beta tester primarily for the turntable variant of this system (described on all our Web sites under Maya vase rollouts or just rollouts). However, we also do panoramic photography with this camera. The results are impressive, not due to our own abilities, but largely a result of the technology from the crew at BetterLight: Michael Collette, Robin Myers, Larry Guyer, and others.

The BetterLight system differs in many key respects from all others:

• The only digital panoramic system based on a large format camera
• One of the few systems that uses large format lenses from Schneider and Rodenstock
• Offers the highest resolution system, because it is large format
• The only component system; its not a locked, tethered, turnkey system.
• The only system that does not burden you with a dedicated camera and its cost
• One of the few systems where you can count on constant updates in hardware and software

The BetterLight is deliberately not a turnkey system. This means you can mix and match lenses, cameras, and other aspects of the hardware. You can use the hardware to set exposure and other aspects. Naturally the software also is powerful, with many options.

So if your intent is to create mural-sized large format inkjet prints, BetterLight can provide the resolution in the true optical dpi that you need. FLAAR has enlarged one image to about 5 feet high and over 20 feet long. That was from the Dicomed prototype; an image from the newer BetterLight system should be even better and bigger.

We have used the BetterLight Super 6000 to do panos of our university campus

EPAN
The ePan system has the best lens cover of any. But it appears this company and its product have not survived. Their Web site is frozen with a last year's date: http://epan.net.

That is the problem with hand-made cameras; a single individual designs these as an expression of his personal capability. But no matter how capable these products are, often they do not survive the real world marketplace.

The ePan also is clever enough to rotate their system on the exact nodal point. With other systems, including BetterLight, the individual user has to guestimate the nodal point. Usually there is no instruction manual on this aspect. ePan takes up to an 86 MB image.

Overall, I rate the ePan as the best thought out digital panoramic camera. A potential downside is its on-board computer. An onboard computer adds about $2,000 or more to the cost. However, with the ePan, the significant advantage of an on-board computer is no cables, nothing tethered. This is the most portable of all the digital panoramic cameras I have seen so far.

Downside of tethered cameras is lack of spontaneity. Setting up other systems requires a table for the computer, and in reality requires an assistant. I usually use a GMC Suburban to cart mine around, with a Kart-a-Bag that doubles as a clever table. Downside of any on-board computer is that they get obsolete fast.

As with other product classes, no one single camera has all the optimal features, but ePan is close. I hope they survive and reproduce, however evidently the company no longer exists.

SUMMARY
I have used a number of panoramic cameras such as the Seitz, the Dicomed, and the BetterLight. At two Photokina trade shows I have looked carefully at all the others.

If you need a camera for security surveillance or other QTVR needs, then PanoScan or Spheron are options.

If you need an industrial strength photogrammetric system, then KST.

If you are a landscape photographer then BetterLight is a tried and proven system for doing large blowups.

Digital is clearly the way to go because you can print the images yourself at any size. We have a ColorSpan printer which can reproduce 72" by however long you have resolution to fill. No darkroom enlarger can do that.

If you do panoramic photography as a hobby second business, or retirement business you can use a 24" Epson 7600 or 42" HP 5000 to print at home or in your studio.

WHAT TO LOOK FOR IN A DIGITAL PANO CAMERA?
First: will the company survive long enough to provide tech support?

Will the company survive long enough so your camera still holds value in future years in case you wish to sell it? ePan is a good example of a company which never really got off the ground, a shame, since it was a great camera.

Second: who writes the software? Rarely it is the camera company itself; Spheron may be an exception. But even if the camera inventor himself does not write the software, are they software savvy? This would be the case with BetterLight. Michael Collette knows digital imaging inside out, as do the people at Spheron and KST.

An extension of the software aspect is, "how often is the software updated?" If the camera developer simply pays

more on page Twenty

Discussion of Digital Panorama Cameras
from page Nineteen

an outside company to do the software, there may be few, if any updates. With BetterLight there are new software improvements every few months.

Third: how flexible is the system? Are the lenses interchangeable? Is it a turnkey system where the user can not make any changes?

Fourth: what about picture quality? Digital noise, pixellation, and poor color balance are all problems to be wary of.

Fifth: Lighting for interiors? The Dr Clauss system and the KST EyeScan each have their own independent system of illumination which travels together with the camera head. Obviously you can jerry rig your own manner of lighting, but when you are under pressure it sure is easier to have a turnkey lighting solution.

ACKNOWLEDGEMENTS
I thank Michael Collette for providing me first a Dicomed and then a BetterLight turntable system to do rollouts of the circumferences of Maya funerary vases. Since the same camera also does excellent panoramas, a FLAAR team has gone out on location when time allowed. I thank Ries Tripods for providing the wooden tripods, Ron Wisner for providing a very portable wooden 4x5 camera. We especially appreciate the assistance of Bogen Photo for providing Gitzo tripods and Manfrotto tripod heads this year.

I thank Peter Lorber and the Seitz brothers for encouraging me to get into panorama photography to begin with.

Special to Panorama Magazine

Nevada Wide: Panoramic Photography of the Silver State

By Barbara Slivac, Curator of Education Nevada State Museum and Historical Society

Writing about panoramic photography for an audience well-versed in this art is intimidating, particularly since I am one of those people capable of taking blurry pictures, no matter how good the camera. However, as the museum educator, this exhibit was another opportunity to learn. As I put together information for the museum's student and adult audiences, I learned about the history of cameras and picture taking. I was surprised at the rapid development of panoramic photography and cameras. It seems that after the invention of photography in 1839, panoramic views of landscapes and cities were a natural next step.

The earliest photograph in ***Nevada Wide*** is an historic 1876 view of Virginia City shot by pioneer panorama photographer Carleton Watkins. This photographer of Yosemite photographed the Comstock in the 1870s after the mining region was populated with people and towns from the discovery which made Nevada the "silver state." In this three section panorama, we see houses climbing the hillsides, waste rock piles next to mines and mills, hotels and businesses, and a home with laundry on the line—the clarity of the detail in this photograph is incredible. Watkins perfected the technique of wide-angle photography, as well as the method of combining several bird's-eye views into a single ultra-wide, composite panorama.

Three historic panoramic cameras from the collection of the Nevada State Museum in Carson City, each of the swing lens type, are featured in the exhibit. Perched on an antique tripod, the 1906 AL-VISTA Panoramic Camera has a clockwork motor which allows the lens to sweep the unexposed film in a 145 degree arc. The small metal fans which matched the exposure time to the film and the light intensity are displayed with the camera.

A Kodak Panoram #4 "B" sits in another case with its curved film holder exposed. The largest camera on exhibit is a custom made Hemispheric Camera owned and used by photographer P.E. Larson of Goldfield, a central Nevada mining town founded in 1902. It required a negative 34 inches long by 10 inches wide. The swing lens, a "no. 3 hemispheric rapide," was turned by a hand crank through an arc to obtain the wide-angle exposure**.** Larson produced a large volume of Nevada photographs out of his Goldfield based Palm Studio.

Nevada Wide: Panoramic Photography of the Silver State *opened to the public at the Nevada State Museum and Historical Society in Las Vegas on August 24, 2002 and will run through March 23, 2003. Thirty-four panoramic format images reveal views of places and people from Nevada's past. The Nevada Historical Society, Reno, originally developed this exhibit from their collections and those of the Nevada State Museum in Carson City which provided the cameras on exhibit. Las Vegas area photographs were added from the collections of the Nevada State Museum and Historical Society in Las Vegas. Except for major holidays, the museum is open daily from 9 am until 5 pm. Admission is $2 for adults with museum members and children under 18 years of age admitted free.*

The variety of photographs and subjects in the exhibit deserves mention. The smallest panorama measures 23 inches wide and the largest 12 feet. The subjects include aerial views, including one of Reno taken in 1908 from the Lawrence "Captive Airship," actually a train of linked kites attached to a swing lens camera with a 130 degree field of view.

A panorama of all the elementary students from Robert Mitchell School in Sparks posed in elaborate costumes in front of the school left me wondering about the occasion. Because the school still exists, a phone call revealed that the picture should be labeled "Jack's Carnival, 1927." This school held an annual funding-raising carnival

for almost 70 years starting in 1924 with carnival booths based on fairy tales and children's stories. Princesses and flowers, birds and bugs, frogs and several unknown characters are seen in this panorama, with the exact stories which gave them life remaining a mystery.

Because wide format prints were a popular way of recording people, we can see Nevada's 54 State Legislators ranged before the state capitol building in 1919. And standing on the Virginia Street bridge in Reno, a group of 1920s Shriners in full regalia give testimony to the durability of organizations and interesting uniforms. A Nevada Transcontinental Highway Exposition held in 1926 has all the men assembled in a Reno park looking up and saluting the photographer with hats held high. (From a distance, it seems they are waving giant donuts.)

Nevada mines, mills, and mining towns, many now abandoned, were also popular panorama subjects. The men, women and children of Wahomie, a short-lived boom town, all turned out for panorama photographer N.E. Johnson in 1928, and only a few children couldn't stand still. The picture of Weepah, where the 1927 gold rush lasted about one year, shows a few wooden structures and tents neatly laid-out on the "streets."

Some of the mining towns were more durable and their photographs more spectacular. The 12 foot wide image of Tonopah, possibly the world's largest historic panorama, was taken in 1913 by Floyd W. Sheelor. His panoramas, shot with a custom made camera using 22 inch high film, were produced under the "Sheelor Photo Company" and "The National View Company" of Sisson, California. He claimed to operate the "largest panoramic machines in the world." Tonopah, one of Nevada's most durable mining sites, was photographed by Sheelor and also by the anonymous photographers of the California Panorama Co. and the West Coast Art Co. Thirty-five Nevada panoramas from these companies can be seen at the American Memory section of the Library of Congress website, http://memory.loc.gov/ammem/panPlaces08.html.

Las Vegas was also the subject of one of those anonymous West Coast Art Co. photographers whose work was copyrighted in 1910. One of these panoramas, on exhibit in the museum, is also one of the four views of Las Vegas on the Library of Congress website. Our city today is in rapid growth mode, but in 1910 it was a five year old railroad town surrounded by desert and alfalfa fields with its distinctive mountain ranges in the distance. The city's 1980 Jubilee photograph seen here portrays another phase of city growth, the one before the latest explosion of subdivisions and communities.

The more time I spend looking at these remarkable panorama photographs, the more I appreciate the power of the camera. The images in the exhibit testify to the documentary nature of the work of the early photographers and the history they recorded. And some of them are more than documents.

Rose and Pamers freight team with load of provisions for Beatty, 1904 • Photograph by Jack Ramsey, Las Vegas
The photographer captured the first provisions being taken to Beatty when town started in 1904. Nevada's photographers were eager to record such "firsts" in the growth of new towns. Symbolic of community pride, these photographs could be sold to the towns' promoters and citizens as well as to tourists.

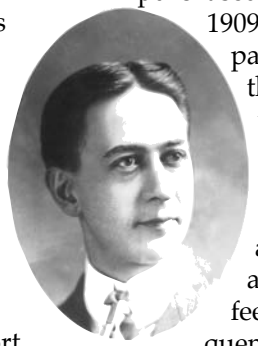
Las Vegas Diamond Jubilee, 1980 • Photograph by Bob Paluzzzi
This 1980 view of Las Vegas was taken from the top of the Union Plaza Hotel. It is the official Diamond Jubilee photo of Las Vegas.

Sandison Exhibit Takes the Wider View

Special to Panorama Magazine • Contact: Annette Bagley (360) 676-6981 ext. 320

WHATCOMMUSEUM
OF HISTORY & ART - 121 Prospect St., Bellingham, WA 98225

The familiar brown pleats and warm, wooden frame of a vintage Cirkut camera and tripod beckon visitors into the space. Immediately, their heads make a slow rotation from left to right as they find themselves immersed in a wall-sized panoramic photograph, circa 1909.



The photographer was James Wilbur Sandison, whose industrious career in Bellingham, WA spanned more than half a century. He arrived at this northwestern port community in 1904, the same year the Cirkut camera was patented. Sandison immediately set up a portrait and commercial studio in Bellingham, where he worked until 1962. During that time, he became widely known throughout the region for the high quality of his photography and for his ability to create art from otherwise ordinary scenes.

Today his work is the focus of the new exhibition, *Taking the Wider View: J.W. Sandison's Panoramic Photographs of Bellingham*, currently on display at the Whatcom Museum of History & Art through Feb. 23, 2003.

Sandison was especially fond of unusual perspectives, and "new" technology. He purchased a No. 6 Cirkut camera in 1909 and employed it to make panoramic photographs of the city's skyline and downtown intersections as well as shipyards, tulip farms, carnivals, group portraits and more. The camera was able to rotate 360 degrees and expose a negative four feet long. Sandison also frequently employed a Banquet camera using 7-by-17-inch negatives.

Taking the Wider View chronicles early 20th century American life in the Northwest as seen through these fascinating photographs. A digital re-print reaching 20-feet in length brings to life Sandison's image of Bellingham's main thoroughfare in 1909, complete with horse-drawn carriages and early versions of the automobile. The previous generation of immigrants had cleared the land to build this new community, and the current residents enjoyed a thriving downtown. Another popular Sandison image captures nearly a hundred children dressed up for a Charlie Chaplin look-a-like contest.

Tracing the development of panoramic photography over the course of a century, the exhibition also features color panoramas of the 1990s, including *Opening Day at Safeco Field* by Tacoma photographer Ron Karabaich. On **Sunday, Jan. 26 at 2 p.m.,** Karabaich will demonstrate his own vintage Cirkut camera and show panoramas from other Washington state photographers, including Aldrich, Bolen, and Pickett. Karabaich is a member of the International Association of Panoramic Photographers and one of very few active Cirkut camera photographers in the Northwest.

A computer within the exhibit also allows access to digital panormas of Bellingham as currently seen on the world wide web at www.tourbellingham.com. On **Sunday, Feb. 2 at 2 p.m.** Jonathan Jackson of Macado Media, which created the website, will discuss the use of virtual reality technology and its varied uses on the web today.

The Whatcom Museum of History & Art, located at 121 Prospect St. in Bellingham, features a vast photographic archives. The Museum's collection includes more than 6,000 original Sandison negatives, which are noted for their clarity and content.

For additional information about *Taking the Wider View: J.W. Sandison's Panoramic Photographs of Bellingham*, call the Whatcom Museum at (360) 676-6981 or log on to www.whatcommuseum.org. Regular Museum hours are Tuesday through Sunday noon to 5 p.m. Admission is free.

Special to Panorama Magazine

Things Panoramic from the Photographic History Collection, National Museum of American History, Behring Center

By Shannon Perich

In 1896, the Smithsonian officially sanctioned a "Section of Photography" that would evolve into today's Photographic History Collection (PHC) at the National Museum of American History (NMAH). The subject matter collected by PHC is the history of photography. PHC represents photographs and photographic apparatus (including some motion picture) that documents the ways in which American have made, used, produced, been influenced by, sold, collected and generally interacted with photography. PHC maintains about 200,000 photographs and 15,000 pieces of apparatus. The collection of panoramic materials, although relatively small compared to some other collections, spans the history of photography.

figure 1

figure 2

Among the panoramic apparatus collection are an 1848 patent model for a daguerreotype panoramic camera (figure 1); professional and amateur cameras, like the Cirkut and Al-Vistas cameras; hand-crafted cameras by Frederick Mueller (figure 2); and cameras with wide angle lenses.

In addition to straight-forward landscapes, PHC holds a range of panoramic photographs that explore various techniques, uses and processes of the format such as, hand-coloring, studies for illustrations, infrared, postcards, time-exposures, and digital photography and printing (figure 3). Among the earliest panoramas in the collection are William Henry Fox Talbot's 1848 Reading Establishment and the five full-plate daguerreotype view of Rincon Hill, San Francisco, California, 1851 by William Shew. The 1845 and 1852 Friedrich von Martens drawings for French camera patents enlighten his views of Paris (figure 4).

Evidence of government investments in Cold War technology is found in the Perkin-Elmer collection of high and low altitude aerial photographs of San Francisco, New York City and the 1964 World's Fair. A little closer to San Francisco's hills are photographs by Gene Wright that include the Bay Bridge and the interior of a apartment. A well known former IAPP member, Jack Rankin, is also represented in the collection. His long thin views show atmospheric Washington, DC scenes.

In the 1960s and 1970s, art photographers embraced the format of panoramic photography to expand their tools of expression. Some artists like Anne Noggle (figure 5) and Jim Alinder play with the enlongated, convex views to push subjects closer to the viewer.

The most recent collecting has included IAPP member Stephen Delroy's views of

more on page Twnety-four

figure 3

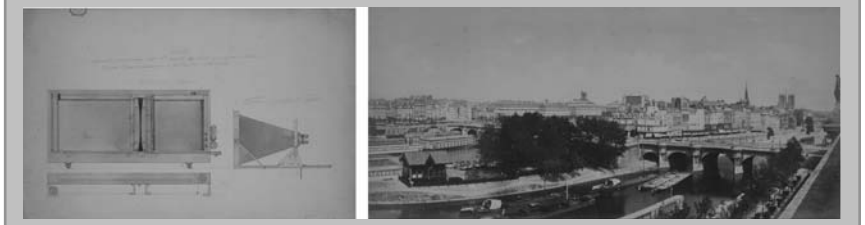


figure 4

figure 5

figure 6

Things Panoramic from the Photographic History Collection

from page Twenty-three

Ground Zero; the Armory Wall, NYC by Diane Dubler and John Taylor; and infrared photography by Judith Vejvoda (figure 6).

PHC and the Smithsonian Institution Libraries have a number of books, pamphlets, trade literature, camera instruction manuals and reference materials to support researching the photographic and apparatus collections.

There are many other photographers whose works were not discussed but are due equal notice such as the stunning eight-foot long albumen views of the Wisconsin Dells by H.H. Bennett and the expansive Western landscapes of William Henry Jackson. To find out more about the Photographic History Collection, please contact me at perichs@si.edu.

Shannon Perich is a Museum Specialist in the Photographic History Collection at the Smithsonian Institution's National Museum of American History. She presented the material above at the 2002 International Convention.

Buy, Sell and Trade...*Free ads for IAPP members*

SERVICES: Drum scanning. Optical resolutions up to 4000 dpi. Quick turnaround. Contact: Russell Davis, 303-828-3933, russdavis@usa.net

SERVICES: Gears cut - 49 pitch and 32 pitch, 14 1/2 degree pressure angle gears with any number of teeth. Less than 50 teeth - $25, 50 to 125 teeth - $35, over 125 teeth - by quote. Gears are fitted with shafts or hubs made to customers measurements. Ron Klein, Northernlight, 1208 Pike Court, Juneau AK 99801-9549. 907-780-6248 or panorama@gci.net.

SERVICES: All cirkut camera services. Gears cut, focal lengths measured, repairs, parts made. Stanley Stern, 813-920-4863.

FOR SALE: Noblex, 150 - Excellent Condition, Make Offer. 402-721-7975 Richard Rader - Fremont, Nebraska

FOR SALE: Seitz Roundshot Super 35 with Pan-tilt head, Nikon 105mm, 50mm and 28mm lenses, and extra battery. Asking price: $4900. Bob Meiborg. 630-668-5418 or rwmeiborg@aol.com.

FOR SALE: Fuji GX 617 Camera Body, Fuji 90mm F5.6 lens with center spot filter and viewfinder, Fuji 180mm F6.7 lens with viewfinder. Fuji focusing screen. Comes in Tenba case. All in perfect shape. $6500.00 U.S. Dollars. Please contact Albert at 604-939-7777 (British Columbia, Canada) or albert@albertnormandin.com

FOR SALE: Imacon 828 - One auto feeder and about 20 film holders. Never used Roundshot 220 VR with Hasselblad adator and extra battery. Never used Roundshot 28/220. I purchased all of this in the last several months and the condition is exactly as new...Everything in original boxes... Bruce Freund. 305 576-7400 (Florida).

WANT TO BUY, SELL OR TRADE?
It's free for IAPP Members!
Just send your ad to:
Richard Schneider
Panorama Editor
P.O. Box 6550, Ellicott City
Maryland, 21042, USA.
email: editor@panphoto.com

Self-Publishing Your Own Photo Book

By Peter E. Randall

Many photographers would like to have a book of their own photographs, but the odds on getting a trade publisher to take on your book are slim unless you have a name as a photographer. But you can publish your own book and make more money doing it than a trade publisher would pay you. This article will outline some of the considerations involved with book publishing and provide suggestions on how to do your own book.

Subject matter is the first consideration. A book of "my favorite photographs" probably will not sell well unless you have a "a name" as a photograper. A defined place such as New Hampshire, Glacier Park, or Central Park is easier sell as a book because you can target the marketing to a specific area. Book buyers who don't know you will still the buy the book because they know the subject.

The book's design has an impact on sales as well as publishing costs. Go to a book store and look at photography books and find a design that you think is appropriate for your photographs. Keep in mind that the page size, number of images, and the number of pages has an impact on costs.

If you have never designed a book consider hiring a designer or a book producer to put the book together. One of these professionals can probbly give advice about costs and other aspects of publishing.

A major one time expense is scanning your imges for the printer. You can pay for this service, or, if you are handy with computers and Photoshop, you could do your own scans. Excellent medium format scanners can be bought for under $3,ooo and you could easily spend far more than that to get professional scans.

Since the design of the book impacts the costs, it is wise to establish the specifications for the book (page size, number of images and pages, number of copies) before doing a final layout. This means contacting printers with your specifications to get prices And sugg4stions on formats. Solme printers are more flexible as to size than others. Also make sure that your proposed page size is an economical size to print.

I have found that for color books the less expensive printers are in Asia. You can find printers on the internet and many of them have U. S. sales representives. Ask to sample books and get references. Canadian printers are also an otion.

A paperbound book is less expensive to produce, but cloth bound books sell for more and many people like to buy clothbound books as gifts. For small quantities it is probably not economical to do both cloth and paper editions.

You can probably figure that the book will have its best sales the first year so to get a reasonable per unit cost figure on a print run of at least 3,000 copies. You'll have a number of one time costs that have to be amortized over the first printing so plan to do enough books to give you a reasonable cost per book.

more on page Twenty-six

AS FAR AND WIDE AS YOUR EYE CAN SEE

Normally, when you look at any object or scene, your eyes cover a field of view of 145 degrees. Noblex Panoramic Cameras duplicate that field of view, and what your eyes see, Noblex reproduces accurately and flawlessly. Delivering panoramic images that are sharp and distortion-free, Noblex cameras add a NEW dimension to architectural, sports, landscape, wedding or news photography. These breathtaking images give you more than standard camera/lens combinations.

Cast from a single piece of high strength, aircraft-standard aluminum, each camera is hand assembled and quality controlled during every step of production. Two 135mm models, six 120mm versions and our NEW 6 x 17 camera cover virtually anything you want to achieve in panoramic photography. For the professional dealer nearest you, contact: **RTS INC.** 40-11 Burt Drive, Deer Park, N.Y. 11729 (516) 242-6801

NÔBLEX
FROM RTS

AUDITION NOBLEX PANORAMIC CAMERAS AT THESE QUALITY RETAILERS: ARIZ: PHOENIX: **PHOTO MARK** 2202 E. McDowell (602) 244-1976 / CALIF: HOLLYWOOD: **CALUMET** 805 N. Highland Ave. (213) 466-1238 / LOS ANGELES: **REE'S CAMERA** 928 S. Western Ave. #P-23, (213) 380-8477 / **FREE STYLE SALES** 5124 Sunset Blvd. (213) 660-3460 / **SAMY'S** 200 S. LaBrea, (213) 938-2420 / PALO ALTO: **KEEBLE & SCHUCHAT** 261 Calif. Ave. (415) 327-8996 / SAN DIEGO: **GEORGE'S CAMERA** 3837 30th St. (619) 297-3544 / SAN FRANCISCO: **ADOLPH GASSER INC.** 181Second St. (415) 495-3852 **PRO CAMERA** 2298 3rd St. (415) 431-3313 / SANTA BARBARA: **CALUMET** 228 E. Cota St. (805) 965-7053 / **DEL'S CAMERA** 923 Olive St., 2nd Floor (805) 569-1776 / STOCKTON: **MEADOW'S CAMERA** 6506 Pacific Ave. (209) 477-9421 / CANADA; ONT: **EIGHT ELM PHOTO** 8 Elm St. (416) 597-6639 / COLO. DENVER: **WERNER'S MILE HIGH** 430 17th St. (303) 534-5487 / CONN. E. HARTFORD: **SIMONDS PHOTOGRAPHIC** 88 Thomas St. (203) 291-0442 / STAMFORD: **CAMERA WHOLESALERS** 2770 Summer St. (203) 233-1292 / DC: **PRO PHOTO** 1919 Pennsylvania Ave. NW (202) 223-1292 / FLORIDA: DAYTONA BEACH: **BEACH PHOTO** 604-06 Main St. (904) 252-0577 / W. PALM BEACH: **KEN HANSEN CAMERA** 625 N. Flagler Dr. #504 (561) 832-4844 / GEORGIA: ATLANTA: **QUALITY CAMERA** 3450 Stratford Rd.,N.E. (404) 237-7366 / HAWAII: HONOLULU **SNAP SHOT ONE HOUR PHOTO** 676 Queen St. (808) 593-9777 / ILLINOIS: BENSENVILLE: **CALUMET** 890 Supreme Drive (800) CALUMET 860-7447 / CHICAGO: **CALUMET** 520 W Erie St. (312) 440-4920 / **CENTRAL CAMERA** 230 S.Wabash (800) 421-1899 / **HELIX** 310 S. Racine Ave. (312) 421-6000 / NAPERVILLE: **CALUMET** 1815 W. Diehl Rd. (603) 637-1558 / **PHOTO EMPORIUM** 4304 1/2 W. Lawrence (773) 777-3915 / KENTUCKY: LOUISVILLE: **MURPHY'S CAMERA** 1440 Bardstown Rd. (502) 485-1500 / MD: BELTSVILLE: **PENN CAMERA EXCHANGE** 11716 Baltimore Ave. (301) 210-7366 / MASS. BOSTON: **E. P. LEVINE** 23 Dry Dock Ave. (617) 357-5617 MELROSE: **W.B. HUNT**, 100 Main St. (617) 662-8822 / REVERE: **CAMBRIDGE CAMERA** 727 Revere Beach Pkway (617) 284-2300 / MINN. MINNEAPOLIS: **NATIONAL CAMERA** 9300 Olson Hwy., (612) 546-6831 / MISSOURI: KANSAS CITY: **INDEPENDENT PHOTO ART,** 325 S.W. Blvd. (818) 421-3644 / ST. LOUIS: **W. SCHILLER & CO.** 9240 Manchester St. (314) 968-3650 / NEVADA: LAS VEGAS: **CASEY'S CAMERA** 1775 E. Tropicana (702) 736-0890 / NEW JERSEY: MERCERVILLE: **LE PHOTO** 4040 Quakerbridge Rd. (609) 538-1123 / PERTH AMBOY: **FISHKIN BROS.** 285 Madison Ave. (908) 826- 0048 / NEW YORK: GREAT NECK: **KEN-MAR CAMERA** 27 Great Neck Rd. (800) 864-0513 / (516) 482-1025 HICKSVILLE: **KOH'S CAMERA** 2 Heitz Place (516) 933-9790 / NYC: **ADORAMA** 42 W. 18th St. (212) 741-0401 / **B & H PHOTO** 119 W. 17th St. (800) 947-9950 / (212) 444-6600 / **CALUMET** 16 West 19th St. (212) 989-8500 / **CAMERA TRADERS** 44 W. 17th St. (212) 463-0097 / **FOTO CARE** 132 W. 21st.St., (212) 741-2990 / **KEN HANSEN** 509 Madison Ave. & 53rd., 18th floor (212) 317-0923 / **LENS AND REPRO** 33 W. 17th St. (212) 675-1900 / **PHOTO HABITAT** 950 Broadway #704 (212) 473-5655 / NORTH CAROLINA: BURLINGTON: **CAMERA CORNER** 2273 So. Church St. (919) 228-0251 / OHIO CLEVELAND: **DODD CAMERA** 2077 E. 30th St. (216) 361-6800 / OREGON PORTLAND: **PRO PHOTO SUPPLY** 1112 N.W. 19th Ave. (503)241-1112 / PENNSYLVANIA: ERIE: **J.A. CARPENTER** 364 West 21st. St. PHILADELPHIA: **ABBEY CAMERA** 1417-25 Melon St. (215) 236-1200 / TEXAS: ARLINGTON: **ARLINGTON CAMERA** 544 Randol Mill Rd. (817) 261-8131 HOUSTON: **SOUTHWESTERN CAMERA** 500 N Shepard (713) 880-2505 / VT: WHITE RIVER JUNCTION: **PROFESSIONAL CAMERA LTD** 6 Bridge St. (802) 295-5600 / VIRGINA: CHANTILLY: **POTOMAC COMMERCIAL PHOTOGRAPHY** 14240 Sully Field Circle (703) 222-5721 / WASHINGTON: SEATTLE: **GLAZER'S INC.** 430 8th Ave. N. (206) 624-1100 WISCONSIN: MILWAUKEE: **PHOTO ART/HELIX** 840 N. Plankinton (414) 271-2252 and at other quality dealers.NOBLEX DEALER LISTING AS OF 6/30/97.

P. O. BOX 1340 BOWIE, MARYLAND 20718 USA

2003 INDIVIDUAL MEMBERSHIP FORM

First Name:_____ **Middle Name:**_____

Last Name:_____ **Jr. / Sr. / III:**_____

If you are renewing your membership and have no changes to your 2002 information profile, Please check the line to your right then proceed directly to the Annual Membership Dues Table: _____

Street Address:_____

Apartment Number:_____ **Post Office Box:**_____

City:_____ **State / Province:**_____

Zip / Postal Code:_____ **Country:**_____

Telephone Number:_____ **FAX Number:**_____

E-mail Address:_____

Web Site / URL:_____

Panoramic cameras owned:_____

Other Photography / Imaging Organizations you may belong to:_____

_____

Panoramic Interests / Pursuits:_____

If applying as a Full-time Student (regardless of Country of Residence), name of School you attend:

Annual Membership Dues Table – Payment Based on Country of Residence:

United States	**1 Year Membership**	**$45.00**	**2 Year Membership**	**$85.00**
Canada / Central and South America	**1 Year Membership**	**$50.00**	**2 Year Membership**	**$95.00**
All Other Nations	**1 Year Membership**	**$55.00**	**2 Year Membership**	**$105.00**
Full-time Student	**1 Year Membership**	**$30.00**	**2 Year membership**	**$55.00**
Administration Fee (New 2003 memberships only)				**$ 5.00**
Total Enclosed – US Funds ONLY please				**$**

Please have all Checks or Money Orders payable to IAPP and mail to the address above.

Credit Card Payments – Please check the appropriate provider box:

VISA		**Mastercard**		**AMEX**		**Discover**	
Account Number:							
Name as it Appears on Card:						**Exp. Date:**	

Office Use Only:	**Date Received:**	**Date Deposited:**
Check #:	**Approval #:**	**Membership #:**

Self-Publishing Your Own Photo Book

from page Twenty-four

Financing the book is often the roadblock to self-publishing. Certainly don't self publish if you are not convinced that your book is top quality and that it fits a niche. But if your work is quality and no one else has done a book on your subject, then coinsider self publishing.

I read about one photographer who said that he spent more of his time getting funding for his book, then making the images. Consider a private-nonprofit partnership. For example suppose your subject is natural area, a park, etc. A corporation might be willing to make a donation to the nonprofit related to the subject. The latter would give you the money for publishing in exchange for some of the books. I got most of the funding for my New Hampshire book this way.

> *"Preselling the book, based on a dummy of the book and/or sample photographs, is another excellent way to get the book financed."*

Preselling the book, based on a dummy of the book and/or sample photographs, is another excellent way to get the book financed. Suppose you are doing a region or a state. Hotels, chambers of commerce, real estate offices, and corporations seeking executive or Christmas gifts are logical potential buyers of books in bulk. Some might be willing to be sponsors of the book in exchange for mention on the title page and copies of the book.

Several of these approaches, plus some of your own money should allow you to make your book happen.

Marketing is perhaps the most important and difficult part of self-publishing Anyone with money can publish but that does not mean anyone will buy the book. As a start you must have an International Standard Book Number (ISBN) number and a bar code. The ISBN allows your book to be found by libraries, book stores, and internet buyers. Contact R.R. Bowker to get a number: (888) 269-5372 or look on the internet: bowkerlink.com.

To sell your book in chain bookstores you must have a distributor. They receive a discount of at least 55% of the list price (that's the 40% that bookstores get, plus the distributer's cut.). This of course has an impact on on your selling price. If you sell at $35, for example, you will net $15.75 after a 55% discout.

Since most distributors only take orders—they don't sell—you'll have to promote the sales of the book. Reviews, exhibits, articles in magazines, and promotional mailings are only some of the techniques used to sell books. Be sure to budget money for marketing.

A final thought. Thinking about a book and doing a book are two different things. If you think a book subject has potential, then start to work, don't worry about funding. If you don't have

the images you don't have a book. You probably will not be able to generate funding solely on your idea unless you have a track record as a maker of books. You will have to show some work and/or a dummy. But self-publishinfg can pay off. For my New Hampshire book, I was offered a contract that would have paid me about $2 per book. By self-publishing, I have made more $10 per book with over 8,000 copies sold.

Since 1976, Peter E. Randall has produced more than 350 books, most of them heavily illustrated volumes for communities, businesses, and individuals. His company has also produced several volumes of color photographs. Peter has authored 12 books ranging from collections of photographs and travel guides, to local history. His most recent book is *New Hampshire A Living Landscape,* now in its third printing. To contact him directly, email peter@perpublisher.com. Website is perpublisher.com.

panphoto.com

OUR WEBSITE IS CURRENTLY UNDERGOING A MAJOR RECONSTRUCTION.

LOOK SOON FOR NEW FEATURES:

MEMBERS ONLY SECTION

BULLETIN BOARD

CHAT ROOM

INDUSTRY NEW

MUCH, MUCH MORE!

Have Suggestions or An Image For Our New Online Gallery, contact Ron Klein at panorama@gci.net

panphoto.com

A proven trouble-free design that out-performs more costly cameras.

Standard SLR lenses, 20-35mm.
0-360+ pans on 35mm film.
No gears or motors.

$600 Camera body and lensboard.

***NEW!* $65 Lookaround Book.**

Ask for IAPP discount.

Look what you can build!

The Lookaround Book

FULLY ILLUSTRATED - SIMPLE TOOLS AND CRAFTING
SAME FEATURES AS ORIGINAL

LOOKAROUND
928 Beech St., East Lansing, MI 48823
panoramacamera.us

The View Camera Store, Inc.

Wisner

4x10TechnicalField	2195.00
7x17TechnicalField	3095.00
8x20TraditionalL	3800.00
8x20TechnicalField	4000.00
12x20TraditionalL	5000.00
12x20TechnicalField	5000.00

Canham

6x17RollFilmBack	call
4x10Field	2990.00
7x1736"bellows	4500.00
8x2036"bellows	4650.00
11x1448"bellows	6000.00
12x2048"bellows	6000.00

AWB

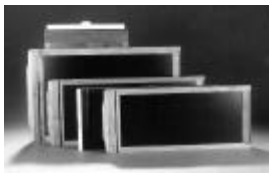
WindStabilizerKit	116.48

CustomFilmHolder

7x17	408.00	8x20	420.00
11x14	420.00	12x20	474.00

HarrisonFilmChangingTents

4x5	154.00	8x10	199.95
11x14	249.95	12x20	349.95



BTZSFocusCloth

4x5	54.95	5x7/4x10	59.95
8x10	64.95	11x14	74.95
7x17/8x20	74.95	12x20/14x17	84.95

IlfordHP5+Film

4x5-25	17.85	5x7-25	27.06
8x10-25	59.17	11x14-25	113.78
7x17-25	93.94	8x20-25	120.62
14x17-25	call	12x20-25	182.15

ArchivalNegativeSleeves

4x5-25	4.92	5x7-100	7.17
8x10-25	12.68	8x20-100	43.42
11x14-100	26.25	16x20-25	24.33

ContactPrintingFrames

8x10	182.00	7x17	197.00
11x14	210.00	8x20	210.00
12x20	231.00	16x20	315.00

RiesTripods

J100	532.00	J250	291.00
A100	616.00	A250	329.00

F.64Backpacks

4x5	175.00	4x5(wheels)	225.00
8x10	275.00	Filtercase	16.00

POBox19450~FountainHills,AZ85269 ~Tel:(480)767-7105~Fax:(480)767-7106
info@viewcamerastore.com

CUSTOM PANORAMIC LAB

ROUNDSHOT

Simply the best built 360° panoramic camera. From 35mm to 5"

The RoundShot 28/220 is HERE!

1385-87 Palmetto Park Road West • Boca Raton, FL 33486
561-361-0031 • 561-361-0494 (24 hour fax)
http://www.roundshot.com • CustomLab@aol.com

PANORAMA

INTERNATIONAL ASSOCIATION OF PANORAMIC PHOTOGRAPHERS
IAPP

OUR WEBSITE IS CURRENTLY UNDERGOING A MAJOR RECONSTRUCTION.

LOOK SOON FOR NEW FEATURES:

MEMBERS ONLY SECTION • BULLETIN BOARD • CHAT ROOM

INDUSTRY NEWS • MUCH, MUCH MORE!

WE NEED YOUR HELP!

Have Suggestions or An Image For Our New Online Gallery, contact Ron Klein at panorama@gci.net

The cover shot, a Hyperbolic panorama by Jook Leung entitled "A Tribute of Light", won "Best of Show" in the print competition at the 2002 IAPP International Convention. For more information and pictures of this technique *see page Twelve.*