# PANORAMA



The Magazine Of Panoramic Imaging

June 1997 Volume 14, Number 3



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

Our offices are located at the various addresses listed below:

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ISSN #1090-994X

#### Presidents Message

**By Fred Yake** 

By now everyone should have received their new membership directory. IAPP members have not had a directory since 1994. I feel that every member is entitled to a list of the members to aid in networking efforts. It may be of interest to note that 25% of our members are now connected to the Internet.

My plan was to produce an attractive, well formatted directory for the membership and by offering our sponsors advertising space we would be able to off set the cost of production to IAPP. Thanks to our committee, the plan worked. The Membership Directory committee members were Liz Hymans, Doug Segal and Fred Yake.

We of course ran into unexpected

problems that delayed production and our scheduled mailing date. We have gained more experience and next years directory should go smoother, cost less and contain more information, such as page numbers in the index and be produced and mailed out the first week of April. On behalf of the Board of Directors and members of IAPP we would like to thank the many sponsors for their

There are two weekend conferences scheduled so far this year. One in Boca Raton, Florida in July and the other in Paris, France in September.

advertising participation in this years

Membership Guide.

There is more information on these conferences in this issue. Should you be

interested in hosting a conference in your area, please contact me.

How do you like the color cover of our magazine? The cost of producing the cover in color for this issue of *Panorama* was sponsored by those hosting the Paris Conference.

During the Boards first meeting following our International Convention, I proposed several ways we might bring in additional money to IAPP without raising dues, for the purpose of producing color photos in every issue and to further promote IAPP. One of those programs already underway is the IAPP Boutique. Details of other programs to raise funds will be announced in the next few months in this column and on our Web site.

### Secretary Says

By Addie Lorber

as it really been more than six months since Cherokee? What a busy time we have all had. The membership renewal drive was successful, and as every year we lost some members and gained others. The IAPP web site is in a transition period and has also generated interest in the IAPP. The new permanent address of the official IAPP web site is: http://www.panphoto.com.

Thanks to Ron Tuttle the IAPP boutique has had a good start with Tshirts and caps leading the sales. This is a new venture for us and more items will be added as time goes on. For those experiencing delays getting their merchandise, please be patient. The stock is being replenished as the orders come in.

Doug Segal and Liz Hymans have worked very hard to put together a really nice membership roster. I know many of you would have liked to have it sooner, but good things are worth waiting for.

Peter and I are planning the next BOCA BASH, July 25-27, 1997. The Raddison Bridge Resort has agreed to a \$69.00/night rate for IAPP members and for those who attended the last bash know it is a beautiful hotel located across from the Atlantic Ocean. They have also refurbished in the last 3 years. Please register early by sending your name and \$20.00 so I know how many are interested. A minimum of 20 members attending is needed to avoid cancellation.

Last but not least I would like to wish a warm HAPPY 70th BIRTHDAY to Richard Fowler. Enjoy each day and live it to its fullest as you have been doing for the past 70.

Hope to see you all in Boca.

This issues color cover provided by Johnny Kurtz, organizer of the Paris, France IAPP Conference. The photo of the Paris skyline was shot on a 5" Roundshot.

## Web Report Digital Panoramic Photography

By Bob Erickson

ooking for a direct to digital panoramic camera? Are you considering buying a rotational camera like a Roundshot, Globuscope, Hulcherama, or Erickson to shoot images for QuickTime VR, Surround Video, or Jutvision? Before you take a trip to the bank to arrange financing, check out Michael Sinclair's web site.

Michael is the Director of the Interactive Media Technology Center, an Institute Fellow and a Senior Research Engineer at Georgia Tech. He holds several patents including two in flight simulation, one on a digital caliper, and one for a haptic lens device.

One day while checking my e-mail I was amazed when I read his note to the panoramic imaging mailing list.

Michael wrote, "I have just completed a small home project of converting an

electronic hand scanner (beautiful, undiscovered box of goodies) into a 360 degree camera - about \$250 and a weekend. Not bad for a 360 degree camera that'll give me a 9 Mbyte 24 bit color image in about 2 minutes and GREAT for QTVR — once you mate beginning to end, all you need is Apple's free PANOTOOL."

This photo by Michael, named *Morningside Neighborhood*, was taken with a modified Logitech Scanman2000 hand scanner. It is actually two horizontal scans taken with the camera level and high. The images were hand stitched together in Photoshop.

For more information go to http://www.oip.gatech.edu/imtcpeop.html.
You will discover how he builds them and more images taken with his direct to digital panorama cameras.

## Attention Panoramic Shooters Badge photo needed

By Bob McIntyre

APP is looking for pictures of the Moab area. A committee will pick one for the name badge photo for our 1998 International Convention in Moab.

Submit prints no longer than 14 inches. The photo will be reduced to  $2 \frac{1}{4} \times 7$  inches. Pictures will not be returned. We would like some sky in the picture, that's where the name goes.

The Moab area is a great place for panoramic pictures. For the badge we will consider Dead Horse Point, Arches,

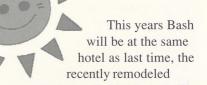
Colorado river around Moab, Monument Valley, and Canyon Lands. There is a wide variety of scenes for anyone's taste.

The prints must be sent to me before September 1997. If we use your picture your name will be printed on the back of each badge.

Send your prints to: Bob McIntyre 808 Sirius Dr. Colorado Springs, CO 80906

### Boca Bash Two July 25-27, 1997

he first Boca Bash was such a great success we are doing it again! Come join in a casual Floridian panoramic weekend.



Raddison Bridge Resort. The hotel phone numbers are 561-368-9500 or toll free 800-327-0130. Be sure to mention IAPP for a room rate of \$69.

Registration fee is only \$20 with any and all profits going into the IAPP account.

For more information contact: Addie Lorber 1385 W. Palmetto Park Rd. Boca Raton, FL 33486 Phone 561-361-0031 E-mail: CustomLab@aol.com





### Paris, France Conference Sept. 12-14. 1997

ake your reservations now for the IAPP Paris Conference. The Conference will include exhibits, field trips, presentations by many European companies Land photographers and a panoramic photography display and contest.

Conference registration: US \$60

Conference Hotels: Hotel Ibis - Tel (33) 1-49280606 / fax (33) 1-49280620 - Note: You must mention you are with the IAPP conference in order to get a room When faxing your reservation give the following information: single/double room, arrive/departure dates, credit card name, number and expiration date. Hotel Novotel - Tel (33)1-4323000 - single/dbl. FF650 Breakfast FF64 Anyone wishing to participate as an exhibitor, give a presentation or if you would like to pre-register, contact:

Conference Chairman, Johnny Kurtz. PO Box 14, CH 8964 Paris, France

#### Schedule Paris Bercy Expo

Friday, September 12 9 am

• Opening of Conference by IAPP President, Fred Yake

- · Concurrent workshops and lectures
- · Panoramic Photographic Exhibition opens to public
- · Field trip and lunch to Gitzo factory
- Group photo
- Concurrent workshops and lectures
- Print judging of contest photos 8 pm
- IAPP lecture

Saturday, September 13

9 am - Lectures and concurrent workshops

10 am - Opening of Exhibits

2 pm - Concurrent workshops

8 pm - Gala Dinner

Sunday, September 14

10 am - Panorama Products Expo

- Concurrent workshops
- · Equipment flea market

#### Photo Contest Rules

The contest is open to all IAPP ■ members and you don't need to attend to enter an image. Photos will be exhibited through out the Conference. Members are encouraged to bring panoramas for display other than those submitted for the "French theme" contest. Prizes include a Round Shot 35/35S, Noblex 35mm cameras and a Gitzo Carbon Tripod.

Deadline for entry August 15, 1997. The theme is to be, *Typically French*, such as French Bread, French Wine, French Cheese, etc. Judges will determine the winner through a point system.

Information on back of photo must include, name, address, phone number, fax, e-mail, type of camera used, technical data, speed, f-stop, lens, etc.

Participants of the contest allow the copyright of their photos for press release about the contest in various photo magazines and the photo will be used in a traveling exhibit. Send photos by registered mail: IAPP Paris Panoramic Photo Contest, Johnny Kurtz, PO Box 14, CH 8964 Paris, France

### **VR News**

by Gerald Raasch

eace River Studios produces professional products for the production of OuickTime Virtual Reality (QTVR). The 3Sixty is a panoramic camera mount designed and marketed by Peace River Studios. With the 3Sixty, the photographer can create up to a 360 degree panoramic image using a digital still camera or a standard 35mm SLR. The 3Sixty aligns the nodal point of the camera's lens with the axis of rotation of the complete OTVR outfit. Using an indented indexing mechanism that rotates the camera easily in one direction, the 3Sixty produces a sequence of overlapping images taken about the axis of rotation. Precise intervals are established between these overlapping images. These images are then stitched together using VR panoramic creation software, such as Panimation's Nodestar. Alternatively, photographs created by the 3Sixty can be carefully cut and



3Sixty Jr. is also available.

For further information on the 3Sixty and the 3Sixty Jr. Panoramic Camera Mount, contact:

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Peace River Studios 9 Montague Street Cambridge MA 02139. 617-491-6262/fax 617-491-6307 QTVR@PeaceRiverStudios.com. To rent the 3Sixty, contact:

The Lens & Repro Equipment Corp. 33 West 17th Street. New York NY 10011. 212-675-1900/fax 212-989-5018

The IAPP Boutique...

...for your official IAPP merchandise. new items now available!

See page 10



### **DIY Panoramic View Cameras**

By Tom Fuller

ere is a simple modification procedure for turning virtually any 4x5, 5x7 or 8x10 view camera into a flat-back panoramic that makes two or three separate images on a full sheet of film. The use of standard film sizes does away with processing lab surcharges as well as the dust and scratches common to film tediously hand-cut to fit mongrel holders. And, as no internal changes are made to the camera, it may be returned to full-format use at any time.

Starting with the back assembly from a 5x7 Ballester and adding a bellows and focusing rail from Peter Gowland's 8x10 Pocket View, I built the camera shown here to prove the concept. Working from the ground up and doing all of the machining gave me full design control, but at a total outlay of about \$600. Although the cost of parts drops with existing cameras, design time increases due to unavoidable work-arounds. Because of these differences, I feel a procedural overview will be more helpful than a step-by-step guide.

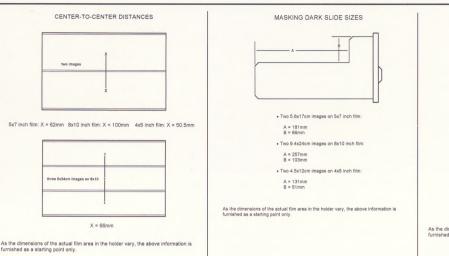
The idea is to mask half the film with a cut-away dark slide, align its center with the lens axis and make an exposure. The slide is flipped to shield the exposed area and uncover the fresh half, the back slid up or down to place this surface behind the lens, and another image made. Exposing part of a large format negative with moveable masks in the camera or holder is not new, but using a masking slide for panoramas poses a unique problem. Very few cameras have adequate rear rise and fall - ignore front movements for the moment - to move the film

the required distance.

The addition of lock screws, made by setting 1/4x20 studs into the rear of the body, and slotted vertical standards, machined from rigid aluminum flat stock,

provide the travel. Actual mechanics will be dictated by camera design, but screw placement and slot length must produce at least the movement shown in the center-to-center diagram. It is also important that the slots be straight and parallel so that the film plane remains at right angles to the optical axis.





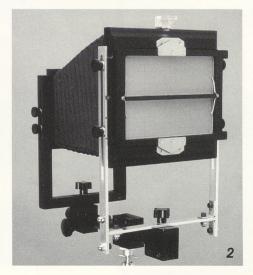
SUDE FOR TOP & BOTTOM DEPOSURES

A = 257mm
B = 71mm
C = 61mm
As the dimensions of the actual film area in the holder vary, the above information is furnished as a starting point only.

DARK SLIDE MASK SIZES

FOR THREE 6Y24CM IMAGES ON 8Y10 INCH EILM

Appraise the camera carefully before starting. The bellows must flex enough for the substantial rear travel, yet extend and compress adequately for the lenses you plan to use. This range will be limited with a pleated bellows, but a recessed lens board will focus short optics and an extension cone, or a recessed



board reversed, accommodates longer lenses. A bag bellows solves most problems, but it may preclude the use of

#### DIY continues on page 6

- 1 My prototype makes two 6x17cm images on a full sheet of 5x7 film. Anyone with good workshop skills can build one similar or modify an existing large format camera. The index lines mark the zero point for normal lens rise and fall, top-or-bottom film movement being achieved by slotted rear standards.-photo by the author
- 2 Find the center point of each image as described in the text and determine the amount of travel needed. A wooden separator strip is glued to the outside of the ground glass to speed composition. Although the entire lens image is visible on the glass, the masked film in the holder records only what is seen in the top or bottom half. As shown in the diagrams, three images can be made on a single sheet with two masking slides.
  -photo by the author

#### DIY from page 5

longer-than-normal focal lengths. The 8x10 bellows that I cut to fit the 5x7 back shown here has a range of 135mm to 300mm with a flat board.

Rear movements not present on the existing camera can often be incorporated into the new standards, a particular plus with many folding wooden models. This prototype has only rear swing, but a pivot arrangement would add base tilt and a slot in the bottom bar would provide shift. The level of sophistication is up to you, but I highly recommend making a full-size drawing of the camera and all proposed parts first to check for mechanical interference. Remember that more bellows flexibility will be needed with added movements.

As film guides within the holder vary slightly in size, use only those from one manufacturer. Find the exact center points and masking slide size by inserting a sheet of paper and tracing around the inside with a sharp pencil. Remove the sheet and carefully draw a 5mm margin down the center. Measure

from the traced film guide line to the beginning of the margin and mark the center of each half. The center-to-center distance, or total travel of the rear standard, is the distance between these two points. Cut the masking slide to just cover the margin.

Mark the slide and drill a small hole where the two lines intersect to eliminate a crack-prone square corner. Score the fiber material deeply with a sharp knife guided by a straightedge, then gently flex it back and forth while watching the opposite side for a stress line. When visible, flatten the slide, score on the line and continue to flex until separation. Smooth the edge with medium-fine sandpaper taped to a smooth wood block. Spare slides for 4x5, 5x7 and 8x10 Lisco holders are available from Calumet Photographic, 1-800-CALUMET.

I am often asked why normal front rise and fall cannot be used to accomplish the center-to-center shift. It can, provided the camera has sufficient travel, but remember that even slight lens displacement significantly alters scene perspective. With rear slide action, full front and back movements can be made as needed without the setup being disturbed between exposures, the top-to-bottom change moving only fresh film into position. Movement can be made in other ways,

such as mounting the rear of the camera off-center and turning a four-way or rotating back 180° between exposures, so think the modification through carefully.

IAPP member Tom
Fuller is a Midwestern
commercial photographer
and feature writer for the photographic
trade press here and abroad. E-mail
him at 75107.2567@compuserve.com.
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Below: A 6x17cm image made with the prototype camera described in this article and a 210mm lens.
-photo by the author

Left: Working with the mask requires a few more steps than a conventional film holder, but practice makes perfect. Stick bits of tape to both sides of the holder to indicate fresh film and pull them off after exposing each half-side. Identify the masking slide clearly with red tape to avoid exposure accidents.

-photo by the author

All submissions, articles, ads, etc. must be sent to: IAPP PO Box 2816 Boca Raton, FL 33427-2816 561-393-7101 561-361-0494 (fax)

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### **Wedding Panorama**



This wedding day panorama was photographed by Any Tremblay, IAPP member and daughter of president-elect Denis Tremblay.

#### To join IAPP call or write:

IAPP - Addie Lorber PO Box 2816 Boca Raton, FL 33427-2816 561-393-7101/561-361-0494 (fax) Internet: CustomLab@aol.com

Send your name and address for membership information: \$40 North America. \$50 Elsewhere

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Issue

Deadline

August 97

July 1

October 97

September 1

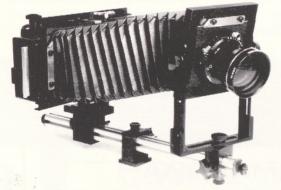
December 97

November 1

Please send in your stories, photographs, technical information, etc. to:

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### Presentation Of Panoramic Images In Digital Form

By Les Palenik

Intil recently, the only way to display panoramic images was to produce elongated, large-format photographs. While this method will likely continue in the foreseeable future as the highest possible quality display, there are situations where a digital image presentation may be more appropriate.

With the advent of the increasingly powerful computer hardware and software, it is now feasible to process and show your images in an electronic form. The digital processing of panoramic and 360° photographs offers many new possibilities and is especially suited for digital image libraries and portfolios, for interior architecture, and linked/integrated images.

If you want to view your digitised images in linear form, you can use practically any imaging program or viewer. Most of these programs allow you to zoom and pan vertically and horizontally through the image. For a true 360°

experience, however, you must use either QuickTime VR (Apple-based) or Surround Video (PC-based) software. These programs "correct" the flat look into a more realistic circular appearance, and provide very effective navigational tools.

QuickTime VR has been around for a while longer, and currently it has more viewable applications, but Surround Video is catching up very quickly. The latest version of Surround Video has a very impressive image compression and decompression, and a provision for text and sound. It is now tightly integrated into Microsoft Office97 suite, which means that you'll be able to incorporate 360° images and sound clips in PowerPoint presentations and Word documents.

#### **DIGITAL PORTFOLIO**

Once your images are digitised and organised on a CD-ROM, another disk media, or your own web page, they can be distributed and shown in a very inexpen-

sive way to all your friends, customers, and prospective clients. In contrast to prints, the digital images take very little physical space (they can fit on a floppy disk or CD-ROM), and don't suffer in quality through transportation and repeated handling.

#### ARCHITECTURAL TOURS

A self-guided, interactive navigation of a collection of 360° photographs, is the simplest, most natural, and most effective way to tour a house, shopping mall, or a golf course. Your viewers can browse and navigate the images in an unrestricted fashion, making it a very enjoyable experience.

#### LINKED IMAGES

Multiple images. i.e. individual rooms of a house, can be easily linked into a complete "movie" or

"Virtual Reality presentation". The linked images may reside on the same disk or a computer, or they may be located in different parts of the world on other web sites.

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#### HOW TO DO IT

To convert your panoramic images to digital form, you'll have to do the following:

1. Produce first a 360° image. This can be easily accomplished by using any rotational camera. You can use positive or negative film. The negative film is less expensive and can be used also to produce large format prints. Positive film, on the other hand, produces higher-quality scans. Alternatively, you can use a standard 35mm SLR camera, a tripod equipped with a special turntable, and take multiple photographs of the scene. The angle and number of pictures will depend on your camera, and the type of imaging program you are using. The best

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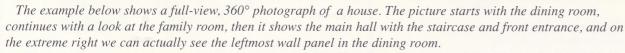
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When displayed on a computer screen, the picture is optically corrected and converted into a cylindrical form. The viewed perspective is much more realistic and the selection of the starting point is not important, because the image shows as one smooth continuous circle (with no apparent beginning or end).



quality can be accomplished by positioning the camera upright and taking one image every 20°-30° (total of 12-18 images for a full circle). Scan these pictures and "stitch" them together by using one of the above mentioned programs. This method doesn't require any special camera equipment, but obviously, it is much more time-consuming than shooting pictures with rotational cameras.

Another variation of this method is to use a digital camera and produce a series of pictures directly in the digital form. You'll still have to do the "stitching" of the images, but you'll eliminate the scanning process.

As to the actual camera, at the present

time, the Seitz Roundshot 220VR camera is the most advanced rotational camera, optimised specifically for computer imaging. It uses 220 film and it gives you more "floor and ceiling" than other rotational cameras. Among other fine cameras are Roundshot Super 35 and 35/35S, Hulcherama and Globuscope. Any of these rotational camera will produce an acceptable image and saves you the need to combine multiple images into one panoramic picture. Since the image will be digitised, it can be easily manipulated and corrected for exposure, saturation, or color balance.

Much more critical a point for taking good pictures is the choice of the lens, or more so the ability to interchange the lenses to select the most suitable focal length. Similar to slide shooting, the secret is to fill the film space vertically with the target image, so ideally, you would need at least three lenses - i.e. 14-19mm for interiors, 80-200mm for far landscape scenes, and 24-50mm for anything between those extremes.

A camera with a fixed lens will impose definite restrictions, however, by knowing the equipment limitations and using your imagination and a few tricks, you can still produce impressive images.

2. Scan the image by using a drum or flatbed scanner. Although a large image delivers a higher resolution, for practical reasons it is easier to scan smaller images. It is usually best to scan the film

directly, but if you have a flatbed scanner, you can get printed small proofs from your negatives, and then scan the prints.

3. Import the scanned image into Adobe Photoshop, Corel Photo Paint, Paint Shop Pro, or another image manipulation program, and make any desired adjustments (increase saturation, contrast, remove unwanted objects), and crop it to the desired size. Keep the size and the resolution to absolute acceptable minimum. Smaller images take less space on your disk, and they can also be downloaded in less time. For example, if you decrease the resolution from 300 lpi

Digital continues on page 11

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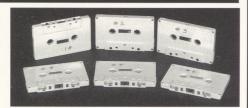
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#### Digital from page 9

to 150 lpi, you can reduce the disk requirements to 25% of the original file size.

4. Using Surround Video or QuickTime VR programs, you can further edit your images and link them together to create a "movie" (one master image linked via hot spots with other images).

5. Finally, by using a Web design

tool, Visual Basic, C++, or Java language, you can incorporate the images directly into your application, or place them on your web page. By using Photoshop 4.0 you can easily incorporate a "watermark" to protect your rights.

Other possible applications for 360° photography include education, training, games, and information

kiosks. I'm sure you'll come up with many other examples and uses for this exciting technology. If you have any questions or special needs, feel free to call me, and we might be able to advise you or assist you with your special project.

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### "Panoramic Photography: A Broad Point Of View"

#### May 1 - November 14

he Clatsop County Historical Society presents an exhibit of unusual antique panoramic cameras and photographs depicting people and places in Clatsop County at the Heritage Museum, 1618 Exchange St., Astoria, Oregon. These wide angle photos, up to six feet in length, illustrate with remark-

able clarity subjects including Oregon Pioneers, Civil War Veterans, Seaside in 1912 and Astoria's devastating 1922 fire. The exhibit opens May 1 and runs through November 14. Summer hours at the Heritage Museum are 10-5 daily. Admission in \$5.00 for adults, \$2.50 for youth (ages 6-17). Admission fee includes Captain George Flavel Museum and the Uppertown Firefighters Museum, members admitted free.

In addition to the many photographs on display, the exhibit highlights panoramic photographers and the development and techniques of panoramic photography.

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Exhibit continues on page 13

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### The Importance of the Focal Length

By Stanley Stern

It is especially important, to know the true focal length of a lens that you are using for cirkut photography. The proper amount of film to be pulled past the slit is determined by this. Ideally the scale on the camera should be used to focus the camera. This can only be done if the true focal length is known.

Most lenses have the focal length printed on the inside of the barrel in the front of the lens. This may not be the actual focal length though. The focal length must be measured to be accurately determined. One way to do this is with a device called a nodal slide. The lens is mounted with its nodal point over a pivot point. The lens is pivoted about its nodal point. The nodal point is the point at which all the rays of light converge to a point. The distance from the pivot point

to the focusing screen is the true focal length of the lens.

When making a cirkut photograph, or any rotation panoramic photograph for that matter, you are actually taking a picture on the surface of a cylinder. The cylinder has a circumference (C) which is determined by both the focal length of the lens and the focus distance. The focal length, which is also the distance of the nodal point of the lens from the film plane when focused at infinity, is the radius (R) of the cylinder. The formula for determining the circumference of the cylinder is  $2\pi R$ . What this means is that the further the nodal point of the lens is from the film plane the larger the circumference of the cylinder or the more film you need to pull past the slit.

Each of the different gears supplied

with the cirkut camera is used for a particular lens and focus distance. These gears determine the amount of film drawn past the slit. Gears have a specific number of teeth. The amount of film pulled is fixed for each gear. This is why the scale is used. The scale shows the distance the nodal point of the lens should be from the film plane for that gear. The circumference of the cylinder is then exactly correct for the nodal point to film plane distance. The lens distance should be synchronized with the gear.

When making cirkut photographs it is best to have the equipment working properly. The synchronization of the pull of film is important to the sharpness of the picture. The synchronization is a function of the gear and lens to film distance. An accurate measure of the lens focal length is the first step to having the synchronization correct.

#### Exhibit from page 11

contains over 23,000 catalogued and preserved historic images, all donated by members of the community. The Archive is open to the public for research purposes by appointment. For more information, or if you are interested in how you can support this preservation effort, call the Historical Society at 503-325-2203.

## CIRKUT CAMERAS

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### Panoramic Photo Pages

Photographs from three of our members are featured in this issue of *Panorama*.

Thanks to the sponsorship of the color cover by Johnny Kurtz, we also get to run color here are the inside spread too! Isn't it great to see these panoramic images in full color?!

Top left: Denis Tremblay took first place in the swing lens division of the IAPP print competition this year in Cherokee, North Carolina with this beautiful image of hot air ballons.

Top right: Niagra Falls, Ontario, Canada is where Rick Zuegel made this panoramic image of the "Little Maid". He used a Widelux F8 and Kodak Royal Gold 100 color print film.

Bottom:Stanley Stern got his #16 Cirkut camera spinning and captured this panoramic of the Grand Tetons during the summer of 1995.

If you would like to sponsor a color cover and inside spread contact:

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### **Upcoming Events**

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*Boca Bash Two* - Raddison Bridge Resort, Boca Raton, FL Registration fee is only \$20. The hotel phone numbers are 561-368-9500 or toll free 800-327-0130. Be sure to mention IAPP for a room rate of \$69.

August 15-18, 1997

4-day Panoramic Photography Class, Grand Canyon
Professional panoramic cameras included; Liz Hymans, Instructor.
Course fee: \$295 Contact: Grand Canyon Field Institute, Box 399, Grand Canyon, AZ 86023. 520-638-2485 or fax 520-638-2484.

August 20 - September 9, 1997

Pan Horama '97 - Panoramic Photo Contest & Exhibition - Tempere, Finland Contact: Panoramic Images, Rainer Lampinen, Puskurinkatu 2, Fin-33730, Tampere, Finland. For entry form contact: IAPP President, Fred Yake.

September 12-14, 1997

Paris, France Conference

Conference registration: US \$60; Conference Hotels: Hotel Ibis - Tel (33) 1-49280606 fax (33) 1-49280620 - w/breakfast - single (FF 359/398) approx. \$60/dble \$68 US Hotel Novotel - Tel (33) 1-4323000 - single/dbl. FF650 Breakfast FF64

May 5-9, 1998

*IAPP International Convention, Moab, Utah*Mark your calanders now! More information to follow in *Panorama*.

### Travel Photography Newsletter

By Chet Hanchett

Photograph America Newsletter is the unique, bi-monthly publication by professional photographer Robert Hitchman. Armed with his photographic gear and a true sense of exploration, Hitchman personally travels to and shoots at the locations featured in his newsletter.

His is no ordinary travel guide. He uses his 30 years experience as a photographer to describe not only the best or most popular views at a particular location but also those less well traveled. His newsletter offers practical tips regarding accommodations in all price ranges, optimum time to catch the best light, and seasonal suggestions for capturing foliage and wildlife.

Hitchman's issues cover locations in the continental USA, Hawaii, and Canada. IAPP members planning to attend the 1998 convention in Moab, Utah will find Hitchman's back issues on Arches National Park (#18), Canyonlands

Newsletter continues on page 18

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For Sale: One 8x20 Korna Banquet camera with 6 holders. New bellows asking \$2,500. Call Chet at 314-718-3600 or 314-849-4774.

For Sale: Hulcher 120/220 with 2 lenses: 35mm and 80mm, 2 rollers, 2 gear sets, charger, and manual. All in excellent condition, \$4200 or willing to sell Hulcher alone, with rollers and gear sets for \$3500. John Warner, Asheville, NC. 704-254-0346 or fax 704-254-0390, e-mail: panmanjw@aol.com.

Services: All cirkut camera services. Gears cut, focal lengths measured, repairs, parts made. Stanley Stern, 2541 NE 199 St., North Miami Beach, FL 33180. 305-931-0493.

Workshop: 4-day Panoramic Photography Class, Grand Canyon, August 15 - 18, 1996; Professional panoramic cameras included; Liz Hymans, Instructor. Course fee: \$295. Contact: Grand Canyon Field Institute, Box 399, Grand Canyon, AZ 86023. Phone: 520-638-2485 Fax: 520-638-2484.

For Sale: 11x14 enlarger, Carlson PX 51 (Italian made instrument grade machine). Largest carrier has 10" x 12" opening, but I believe it will cover more. Pulsed xenon head, motorized focus and head, pin registered vacuum table, McBeth controller. This is not a toy. Sacrificing at \$2000 if you come and get it. Some assembly required. Jim Keller, 210-224-7784.

For Sale: Eleven foot wooden tripod with four heads, 20" x 24" custom production contact printer. Send for photos and details. Leonard Bloom, 20301 West Country Club Drive, #421, Aventura, FL 33180. 305-935-3303.

Wanted: Lenses for VPan 6x17 camera. 150mm, 180mm, 210mm with minimum image circle of approx. 220mm. Must be sharp. Terry Thompson, 510-420-1630 or fax 510-654-6890, e-mail: tpthompson@sfo.com

Wanted: Center filter for Fuji 617. Also looking for Kodak Panoram cameras. Al Isselhard, 716-638-6994.

For Sale: Noblex large format slide projector with panoramic adapter, \$1800. Wanted: Hasselblad or Rollei medium format projectors. Manley Koehler, 5532 Fish Lake Dam Road, Duluth, MN 55803, Phone/fax 218-721-3096.

For Sale: #10 Cirkuts, Governor models, \$3500 to \$4500 each, #10 Fan Camera, \$2000. Also have #6 camera, \$1600 and #16 Cirkut camera complete with lens, all gears and 100' film, \$8500 or best offer. All cameras work. Reprinted instruction books for #5, #6 outfit, and #10 for \$6 each. Reprint #16 instruction book - \$25. Reprint of 1916 Century Cirkut catalog - \$20. Can also supply instructions for fan cameras. I also have new springs and many spare parts and gears (no list, so specify - sorry no knobs), cheap cirkut printer boxes, and black & white processors. Wanted: Ring gears for any size cirkut, especially 12" diameter, tripod legs - Eastman Professional or Crown #4, and Wollensak Raptor 1a lens for #6 camera. Jim Johnson, 28W351 Geneva Road, West Chicago, IL 60185. 630-293-0431.

Services: Gears cut - 48 pitch and 32 pitch, 14 1/2 degree pressure angle gears with any number of teeth. The gears are priced as following; 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. For more information contact: Ron Kline - Northernlight, 1208 Pike Court, Juneau AK 99801-9549, phone 907 780-6248 or e-mail panorama@ptialaska.net.

Wanted: Fuji GX617 camera. Please call or fax Dan Beigel. 410-974-1234 or fax 410-974-1110.

For Sale: 10" VPIII cirkut film (no minimum required), \$32 per roll + shipping. 10" Pro 400 cirkut film; Kodak requires a minimum of 100 rolls ordered at a time. Lets pool our orders (received about 6 weeks after order is placed). Call 806-793-0641 for details or to place an order.

For Sale: Fujica Panorama G617 Professional. 120/220, 1:8/105 lens, center-spot filter, polarizer filter, lens shade, case, like new, \$2850. Rich Rader, 402-721-7975.

#### Newsletter from page 17

National Park (#35), and Monument Valley/Canyon de Chelly (#27) extremely useful in planning their trips.

Robert Hitchman is extending a special offer to IAPP members for all three above issues for just \$10. He is calling it the IAPP 98 Moab Convention Special.

And while this publication is a great resource for photographers planning a first trip to a location, they are equally practical for those who travel regularly.

Newsletter continues on page 19

### **FUJIFILM**

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#### Newsletter from page 18

Hitchman regularly updates his references to assure subscribers the most current and useful data.

An annual subscription (6 issues) is only \$45. Back issues are \$8.50 each. Perhaps the best value currently offered



by Hitchman is all 47 back issues and a one year subscription for \$135, all 47 issues and a two year subscription for \$165. Either package will provide over 600 pages of

location and photography information, organized and indexed in a sturdy 3-ring binder.

Recently at the Nature Photographers Convention in Corpus Christi, Texas I met Robert Hitchman. We talked about the use of panoramic cameras in the field for both scenic and wild life photography. Robert uses mainly 35mm, and medium format while shooting for his newsletter.

However, he is convinced that his publication can save panoramic photographers hours of time consuming research and prevent costly location mistakes. This is especially true if the panoramic photographer has limited time at any spot and/or is working on a restricted budget. In fact, Hitchman is so convinced that panoramic and large format specialists will find his newsletters a tremendous help that he offers a guaranty - if not 100% satisfied, a subscriber can cancel at any time and receive a full refund for any unmailed issues. Photograph America Newsletter's goal is to maximize your time in the field taking pictures.

IAPP members can contact Robert Hitchman at 1333 Monte Maria Ave., Novato CA 94947-4604. Phone 415-989-3736 or fax 415-898-3377.

By the time you receive your IAPP newsletter Robert will be a new member of the IAPP. When you give him a call welcome him aboard. He is planning on attending our International Convention at Moab in 98!



## Places to Visit.... Crystal River Valley & Power Station

By Brian Williams

trip through the Crystal River Valley of Colorado is sure to generate excitement, wonderful memories, and plenty of knuckle gripping, brow wiping, and deep breathing as you travel along the very rough and rutted Crystal River road.

If you decide to drive, a 4-wheel drive is definately required and a knowledge of driving in mountain terrain is recommended.

My goal in traveling the Crystal River road is the picturesque power station, perched on a rock outcropping that crosses the Crystal River and forms a small waterfall. This power station dates back to 1892 and provided power to drills for mining silver, lead, and zinc throughout the area. Even though the building is somewhat dilapidated, its unique and dramatic setting guarantee to lure photographers and produce some memorable photographs.

Just beyond the power station is the town of Crystal. During its boom

days, Crystal had a hotel, several stores, two newspapers, saloons, a post office, and a population of about 500. Today, Crystal is mostly a summer retreat with the feel of a ghost town.

Using the 6x17 format, the best overall photo can be made slightly down river with a 90mm or 105mm lenses - a crude path leads down to the river. A longer focal length lens can certainly be used to isolate the power station but you will lose the overall feeling of the scene. With a rotating camera, the Crystal River leading to the power station, the power station itself, and the Crystal River moving downstream can be captured in one image. I especially like the setting during fall when the Aspen trees change color, usually peaking around the 3rd week of September. Since the power station faces West-Northwest, afternoon sunlight will dramatically highlight the wood grain and the Aspen trees.

Places continues on page 21



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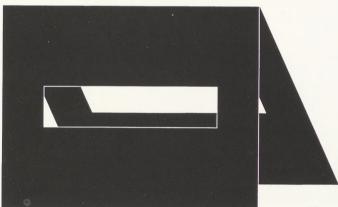
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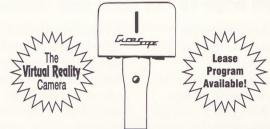


At Franklin, they took the time and effort to listen to our needs, and then followed through by creating what I consider is the perfect panoramic presentation mat. 99

- Doug Segal, Panoramic Images Stock Photo Agency

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### IAPP International Convention Moab, Utah

May 5 - 9, 1998



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#### Places To See from page 19

Directions: From Glenwood Springs, proceed south on Colorado 82 to its junction with Colorado 133. Head south on 133 and follow signs to the town of Marble - you'll make a left turn here. If you start climbing toward McClure Pass you've gone too far. Go through the town of Marble, approximately 7 miles, past Beaver Lake, to the beginning of a long, steep hill. A sign at the bottom of this hill recommends 4-wheel drive from this point but a passenger car can make it to the top of the hill (at this point 4-wheel drive is required). If you decide to hike the 4 miles to the power station, there are a few spots to park your car at the top of the hill. The hike is mostly level and can be completed in 1 - 2 hours, depending on how many photos you stop for.

From the top of the hill, take the right (downhill) road - Forest Route

314. Shortly thereafter you'll pass Lizard Lake, with the road alternately passing close to the Crystal River or moving up high away from it. Route 314 passes on the north side of the Crystal River while the power station is on the south side. You can reach Crystal and the power station from the east by starting in Crested Butte and going over Schofield Pass, but unless you are experienced driving Colorado jeep roads (and checking with the forest service about local conditions), I would not recommend this route. Another option is to take the jeep tour out of Marble (just follow the signs) and then you won't have to worry about driving a 4-wheel drive road and as an added bonus, you'll learn more of the local history from the jeep driver.

The River Mill at Crystal River Valley, taken by Brian Williams.

### **Noblex Panolux Exposure Module Announced**

PRESS RELEASE

Deer Park, New York R.T.S. Inc., **Exclusive Distributor** of Noble Panoramic Cameras, Noblux Projectors, and Prestor Lenses. announces an exciting new addition to the Noblex line of professional cameras and accessories: the Panolux Exposure Module.

The Panolux,

affixed to the top of the camera via a "hot shoe" type of mount, automates and varies exposures in three different modes of operation.

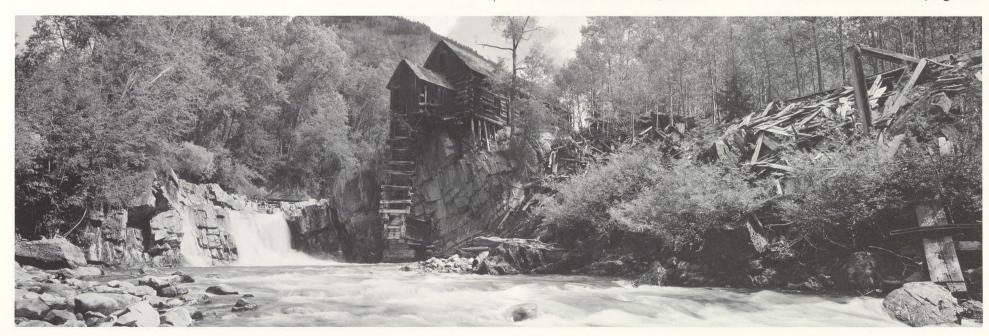


Prior to any exposure or measurement, the correct ISO and desired aperture must be programmed into the Panolux Exposure Module.

Mode 1. Standard Exposure Mode In this mode of

operation, the Panolux operates as a

Panolux continues on page 22



#### Panolux from page 21

reflected exposure meter. Also, mode #1 makes the camera operate in Aperture Priority.

After the Panolux is attached and programmed, rotation of the lens/drum is automatically controlled, with the Panolux choosing the correct drum rotational speed. Speeds are stepless, and therefore the camera is not locked into only the shutter speeds shown on the shutter speed selector dial.

#### Mode 2. Varied Exposure Mode

In the Varied Exposure Mode, the Panolux operates as an incident meter. A single reading is taken and locked into the memory of the exposure module. When the shutter release button is depressed, and the lens/drum begins it's rotation, the memorized light measurement will cause the rotation of the drum mechanism to either slow down, in the case of a "cool" or darker area of the subject to be photographed, or speed up in the case of a "hot" or brighter area of the

Technical Data - Panolux Exposure Meter

Reflected Meter

Incident Meter (2)

subject to be photographed. This slowing down/speeding up of the lens/drum helps greatly to even out the exposure. Exposure graduations from the darkest area to the lightest area will be a total of 3/4 of a stop. (Best utilized with chromes because of the narrow latitude of this type of film.)

#### Mode 3. Inverse Exposure Mode.

In the Inverse Mode, the Panolux operates again as an incident exposure meter. A single reading is taken and locked into the memory of the Exposure Module. As in many verticals taken with a panoramic camera, the sky portion of the photograph will tend to be more overexposed than the rest of the photograph. Also, the foreground portion of the photograph will tend to be darker. When utilizing the inverse mode of the Panolux, the rotation of the lens/drum is speeded up during the first 1/2 of the exposure and slowed down during the second 1/2 of the exposure, therefore evening out the

> entire exposure. Like the Varied Exposure Mode, the total exposure compensation equals 3/4 of a stop.

Angle of Measurement/ 33° Reflected Mode The PANOLUX is available for the Models Angle of Measurement/ 135 U, 150 U, 150 U 150° Incident Mode

Silicone Photo Diode

Silicone Photo Diodes

Measurement Axis 15° angled towards foreground

Film Speed Range ISO 25 to 3200

Shutter Speed Range 1/500 sec. to 1 sec.

f 4.0 to f 16 in 1/2 stop increments Aperture Range

Power Supply 2 x 1.5 V (LR 1) PLUS and the 175 U PLUS.

For more information contact:

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□ 38 - Driving and Photographing The Alaska Highway
□ 39 - Capitol Reef National Park - Utah
□ 40 - Big Bend National Park - Texas
□ 41 - Pacific Rim National Park - Vancouver Island

42 - More Hidden Slot Canyons of the Southwest

43 - Upper Michigan Peninsula Autumn Color
44 - San Francisco Bay Area Foothill Landscapes

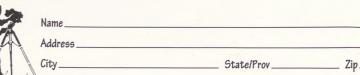
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### From The Mailbag

Dear Addie,

I am Rodger Cuccio, a brand new member of IAPP. I am a serious amateur photographer who just a month ago purchased a Fuji G617. Ever since I shot my first roll I was hooked. I originally got into panoramic photography by using the panoramic adapter for my Minolta 7xi. I had some excellent results and sold some 11" x 30" framed and matted prints. Many peoples comments were very encouraging so I decided to go with the Fuji G617. Enclosed is one of my first shots taken with my G617 (see below). It is a photograph of Riverfront Stadium in Cincinnati, Ohio at night while the Cincinnati Reds were playing. It was taken from across the Ohio river in Kentucky. I shot four rolls starting at sunset. This particular image was shot at fl6 for 9 seconds. All of the photographs were taken on Kodak Lumiere 120 film. About 15 seconds after I clicked the shutter on my last frame of the last roll, someone on the Reds team hit a home run and the tradition is to set some fireworks off. I couldn't believe that I just missed what would have turned a great shot into a spectacular shot. But all in all I am

happy with my initial results and am looking forward to the many possibilities that this camera will afford me.

I am also looking forward to the possibilities that IAPP will afford me. I am looking forward also to meeting some panoramic photographers from Ohio. I would like to know if there are any others from Ohio who are members of IAPP that I could contact and meet concerning panoramic photography. I look forward to the next publication and especially look forward to seeing other photographers work published in the *Panorama* to get some more ideas of what others shoot.

Thanks for considering my photo for publication. I hope to have more to submit for your consideration after this fall season.

Thank you, Rodger Cuccio

Hi ya'll!

Do you remember those two young men with strange accents from Scotland who did the really big slide show at the IAPP conference in Flagstaff back in 1995? Well, after a couple of years existing in the wilderness, Panomorph is back on the scene and looking for action. We have since changed our name to Vistamorph and no longer wish to be known by our old name. We had a disagreement with a certain establishment in Hollywood regarding the old name, and since we cannot fight the world and Hollywood, we have changed to our new name which everyone now seems happy with.

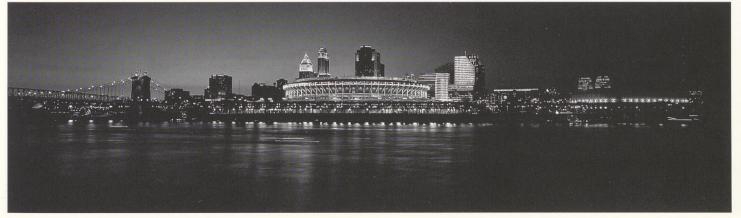
Since we last saw you at the World IAPP convention in Flagstaff in 1995, we have been busy working on several projects for clients. This has in a sense held us back from the business of designing and building new lenses. This task we are about to undertake and we really do hope to have a new shooting lens by the end of this year which should be available for sale or hire.

We have joined forces with a new panoramic landscape photographer here in Scotland. Her name is Audrey Thomson and we believe that you will be seeing and hearing a lot more about her over the coming years. Audrey came to me two years ago when she found herself frustrated with the standard 35mm.

image. We let her lose
on the Scottish
landscape with
one of our
Panomorph
prototype
kits and the
images
she
came
back with
are just outstanding. I have never seen
such atmosphere and magic
captured in a panoramic shot.

Audrey will be in the USA during March/April and hopefully will be able to visit Fred and Jean Yake for a spell. She will be moving on to Vancouver in April. I can't wait to see the shots she will bring back. Audrey and I took a trip out to Egypt last year, and although we only had a few days, we thoroughly photo blitzed the Giza Plateau. This makes for an interesting slide show. We also have some incredible shots coming back to us from Andy Alsop in Antarctica. Andy saw what we were doing when we met in Orkney last year and he just begged for a camera to take down there. As a pilot he can get access to areas that we will never see in our lifetime. That's a show we would love to give you sometime.

In the meantime we are trying to assess the world market for panoramic cameras, the bigger the production number we can produce the cheaper the lens will be. We would like to make the system affordable for all but we have to be realistic here, our lens designer is world class and he does not make cheap lenses. Ultimately



## Think Ahead! Planning for Moab

By Everen T. Brown

he 1998 IAPP Convention in Moab, Utah is still about a year away, but it is already time to *Think Ahead!* 

Each convention gives us the opportunity to share our special format of panoramic photography with fellow members. Panoramic photos line the

members get a chance to display a few of their photos.

This impromptu "exhibition" provides

wells of the main meeting room. All

This impromptu "exhibition" provides everyone with a look at the cutting edge of panoramic photography. Ideas are shared. We see new perspectives. It is a highlight at each convention to see where

> everyone has been, what adventures are behind each image!

Often times it becomes a competition. Seeking out the best. Whether or not you enter a specific print(s) in the competition, do bring samples of your version of panoramic imagery to Moab. Share your vision with us.

Start NOW by making an extra print or two to bring along to the convention. With an early start, you won't be in a list minute panic to find just anything a few days before. And your high blood pressure will thank you for *Thinking Ahead!* 

Check out the "official" IAPP website at: www. panphoto. com

### **New Members**

Welcome to our new members joining IAPP.

Gregory Bartos - Dryden, MI Francis DeLuca - New York, NY Leo Egar - Titusville, NJ J. Jacobson - Columbia, SC Christopher Johnson - Bainbridge Island, WA Michael Kadmar - New York, NY Robert Kempen - Fresno, CA James Lewis - Nashville, TN Rob McElroy - Buffalo, NY Clark Most - Midland, MI James O'Neill - Warren, MI Mitchell Osborne - New Orleans, LA Charles Ptachek - Northfield, OH H.A. Weiner - Randolph, MA Robb Williamson - Denver, CO Dr. Wolfgang Sachse - Ithaca, NY James Wong - San Francisco, CA Ken Wright - San Diego, CA

Charles Armstrong - United Arab Emirates
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### From The Wall To The Web

#### Introducing Jutvision

By Marco Koechli

Thile growing up at home, my parents have always had a full length 360-degree image of the Swiss Alps hanging high on our kitchen wall. Being of Swiss decent, it was almost like being back in the home country. Over the years that wonderful scene has slowly deteriorated due to humidity. Lucky for me it was replaced with another fulllength 360-degree panoramic image of Zurich, Switzerland. When I brought friends over to my parent's house I would always ask then to deduce the time of day that the Zurich panorama was taken. They usually go into lengthy calculations and deductions based on shadows and the position of the sun to find the time of day. The more sublime of my friends will deliver me the answer based on the clock tower in the foreground of the image!

One of the strengths of panoramic images are their large formats and their ability to engulf the viewer right into the image. This is most effective if the panoramic images are of a full 360-degree rotation encompassing an entire visual environment. I always try to mentally envision what a long panorama would look like if I taped both ends together creating a loop and how the image would differ if I stood inside this cylindrical ribbon. The result would

almost be what is now known as Virtual Reality.

With the power of modern PCs and the advent of the World Wide Web, this type

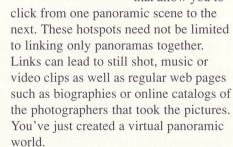
of virtual reality is easy to achieve. With the help of a product called the Jutvision Design Kit, you can view your panoramic images as virtual reality scenes. You can continually pan left and right, up and down, you can even zoom in and out of your panorama. The software reality scene. is easy to use, just

as when I imagined taping together the ends of a long panoramic image, Jutvision does that instantly for you. The best part about it is that once you have created a Jutvision scene it is ready to be shown on the World Wide Web. Both Netscape Navigator and Microsoft Internet Explorer can view Jutvision scenes once they have the free Plug-in installed.

Being able to see your own panoramas on the web is pretty neat. Imagine

looking at a beautiful vista of New York City, spin it around a couple of times, zoom in and out of the Statue of Liberty, then mouse click on the Statue and

> instantly be brought to another 360 degree panorama taken from the statue itself. Better vet, what if you could mouse click on the statue of liberty and be brought to a information web page of New Your City. With Jutvision you can create "hotspots" that allow you to



Even though full 360 degree images bring out the full effect of three dimensional virtual reality, any panoramic image size can be used. Just import a 90 degrees, 120 degrees, 180 degrees, or any other size image and Jutvision will convert it to a 3D scene. Of course panning will be limited to a left and a right border. Possible file formats that Jutvision will import are; Windows Bitmaps (.bmp), JPEGs (.jpg) or even 360 degree full motion Apple AVIs (.avi). Jutvision scenes can also make panoramic scenes from digitally rendered environments made in currently available software packages. Really anything is possible!

Jutvision doesn't take a whole wheelbarrow full of money or a degree in micro computer design to be able to use effectively. Nor do you need the latest and greatest PC technology that would make even NASA jealous. All that is required

#### Jutvision continues on page 26

Below: Panoramic image after being converted to Jutvision format using the Jutvision Design Kit. Virtual reality version of this 360 degree panorama can be seen at: http://www.visdyn.com/jutsamples/cineworld/col.html. The free Jutvision Plug-in is availble at: http://www.visdyn.com/tv/static/downloadplug.html



360 degree colosseum panorama being simpily converted into a Jutvision virtual reality scene.



#### Jutvision from page 25

to run the Jutvision Design Kit is an IBM compatible 486 with a 66Mhz processor, and at least 8 Meg of RAM, an SVGA video card is recommended, but chances are that a 486 computer will already have one built in.

Thinking back to the poster panoramas from the kitchen wall to the virtual reality panoramas available on the world wide web today, things sure are a lot different than when I was a little kid.

For more information contact: Marco Koechli 20 Toronto St., Suite 520 Toronto, Ontario M5C 2B8 Canada

The Jutvision Design Kit and the Jutvision Plug-in are made by Visdyn Software Corporation of Toronto, Canada. 416-368-3088 or fax 416-368-3086 web: http://www.visdyn.com/ http://www.visdyn.com/ e-mail:info@visdyn.com

Look for more
Tips and Tables
in the next issue
of Panorama.

### Photography on Federal Lands

After reading the Park Service policy on photography in the February issue of Panorama, Mike Hanemann thought IAPP would be interested in the U.S. Forest Service and Bureau of Land Management policy on photographing on federal lands they manage. This 1994 policy letter is still in effect.

Dear Editor:

A wire service news article appearing in Western newspapers gives the false impression that Federal agencies are requiring permits and charging fees to photographers who take scenic and landmark photographs on public lands. The impression is wrong.

The news article implied that the U.S. Department of Agriculture's Forest Service (FS) and the U.S. Department of the Interior's Bureau of Land Management (BLM) subject this activity to rigorous control and payment of fees. The conclusion in the article was erroneous and this letter will clarify the correct policy. Most professional and amateur photographers are allowed to take still photographs on public lands without a special use permit or the payment of any

fees. Tourists and recreational photographers also are not required to obtain any permits for taking pictures on the public lands.

A permit for still photography is only required in rare and unusual circumstances. These include:

- when commercial photographers take pictures of public land users, such as those engaged in recreational activities, with the express purpose of selling the pictures to those same users.
- when the photography features a commercial product for sale using the public lands as background (such as magazine advertisements).
- •when the photography would adversely impact the public lands, such as potential deterioration to archaeological and historic features.

When these exceptions occur, the agencies may require payment of a use fee to recover administrative costs. We emphasize that this policy allows most photography to occur without permits or fees. We do request that commercial photographers contact the local FS or BLM office to advise the agencies

of their activity. We appreciate it when captions identify the public land and its location in published photographs.

It is the responsibility of the agencies, as mandated by law and regulation, to administer all activities by private entities, including commercial photographic enterprises, in a fair and equitable manner. Fees for the use of the public's land and resources will be assessed when special circumstances occur. The BLM, in consultation with FS, is currently in the process of revising regulations that cover filming activities on the public lands. The intent of these proposed regulations will be to eliminate the confusion regarding types of commercial filming activities. It is anticipated that the policies for still photography will not change.

The FS and the BLM support and encourage photographers to make maximum use of the scenic beauty of the Nation's public lands.

Telephone numbers: Bureau of Land Management 202-208-5717 Forest Service 202-205-1661

### IAPP Membership Application

Name:	— To renew your membership
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	\$45 elsewhere (If you are joining for the first time add \$5 administrative fee) to:
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Expiration Date:	Payment method:
E-mail address:	Check (made out to IAPP)
Are you a PPA member?	Money Order
If yes, your PPA#:	Visa MasterCard

#### Mailbag from page 23

we want the best quality that is technically possible for our new lens. We are also looking at the aspect of hiring and leasing the camera kits, this may be a way for IAPP members to investigate the format.

Right now we have to do some quick market research and testing before we buy glass for our first batch of lenses. Then we will make three prototypes and conduct some test shoots. If all is well we will produce a small batch of lenses which we hope will be available for use by the end of this year. We have also seen some outstanding applications of our images with the new printing technology. We have a

company here in Glasgow that can produce 4ft. by 12ft. full color, panoramic, one-piece posters from one of our 35mm slides. You have to see it to believe it!

I hear that there may be a conference in Paris, it would be wonderful to see you all there and catch up with things in the panoramic world. Perhaps we could give you a few slide shows.

I never got the chance to say thanks to all of you at the Flagstaff '95 event, you were so kind and encouraging, it's good to work with nice people!

Thank you all. Hope to see you again soon.

Chris O' Kane, Vistamorph.

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