

PANORAMA



THE MAGAZINE OF PANORAMIC IMAGING

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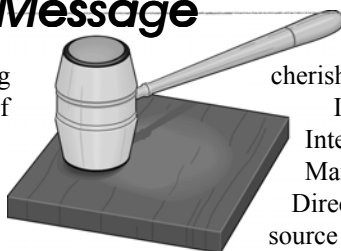
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Presidents Message

The time is nearing the completion of my term as president of the IAPP. I enjoyed this time as it enabled me to get to know you better, and to contribute to the organization which has given me so much throughout the years.

Special thanks to the members who joined Micheling and I in Peresq. We enjoyed each moment spent sharing our experience with them. We will always



cherish those special moments.

I am looking forward to the International Convention in Quebec. Many thanks to the Board of Directors who have been a great source of support during my term. I am also pleased to be passing the president's gavel on to Liz, our next president, who has her experience and leadership qualities to give to the IAPP.

Looking forward to seeing you in Mont Sainet-Anne, Quebec. ■

Secretary Says A Busy Year Ahead For IAPP

By Addie Lorber



A month from now the IAPP will be holding its International Convention in Quebec, and I for one am very excited. The area is picturesque, the colors will be spectacular and the presentations will touch on both panoramic photography as we know it and panoramic photography in the digital age. This will be the last convention in the millennium. If you haven't already made your reservations, do so now and make sure to pre-register in order to avoid lines. I strongly recommend using the travel agent Everen arranged for us, as the fares were the best.

I have received many inquiries from new members never having attended one of our international conventions as to scheduling of speakers and presentations. Please be assured that the bus excursions are not in lieu of presentations, but are for members and guests not wishing to attend the planned sessions. You also find many members wishing to go out and photo-

graph the beautiful sights. One of the highlights of our conventions is the networking and spending time with experienced panoramic photographers, as well as vendors presenting the newest in both photographic and digital equipment. Everen has received commitments from new vendors as well as those exhibiting in the past.

Another question is what types of documentation are needed to enter Canada. If you are an American citizen, a valid driver's license will be enough to enter Canada and re-enter the United States. If you are traveling from abroad, check with the Canadian Consulate in your area whether a passport will be enough, or if a Visa is required.

I look forward to seeing you in Quebec. We meet every 18 months and it's always a treat to catch up with friends from all over the world, as well as meeting members I speak with but never have met. ■

Convention Committee

The Convention Committee for the 1999 International Convention in Beaufort, Quebec, Canada is as follows:

President & Chairman - Denis Tremblay

Co-chairman - Liz Hymans

Registration - Addie Lorber

Print Contest - Bob McIntyre

Sponsors - Everen T. Brown

Exhibits - Everen T. Brown

Member prints display - Will Landon

Awards - Bob McIntyre, Fred Yake

QPP program - Will Landon and Jeff Weissenburger

Nominating Chairman - Ron Tuttle

Registration assistants - Jean Yake and Micheline Tremblay

Photographer - Warren Wight

Boutique - Ron Tuttle

IAPP Nominating Committee Board recommendations:

President-elect:
Everen Brown

Secretary/Treasurer:
Jean Yake

Board Members:
**Alan Bank, Bob McIntyre,
Peter Burg & Stephen Delroy**

Promotion & Membership Report

By Everen T. Brown

I APP is getting a tremendous amount of international publicity due to a mailing I completed to a variety of magazines and trade publications. Information has appeared in Shutterbug, Photo District News, Petersons Photographic.

We are awaiting publication in Outdoor Photographer, Publish, Video & Multimedia Producer, Interactivity, Professional Photographer Storytellers, Photo Electronic Imaging, PC Photo, American Photo, Photo Insider, to name a few.

The response has started and we are signing up new members from this very special public relations push to get our message out to the world! So keep your eyes open when reading these publications. And if you know of any other publications that might help us get new members, please email me at etbrown@everent.com. ■

Convention Hotel



The hotel for the convention is:
Chateau Mont Sainte-Anne
500 Boulevard Beau-Pre
Beaupre, Quebec G0A 1E0
Toll free 888-824-2832.

Prices of rooms range from \$65-75.00
and may vary depending on the
exchange rate.

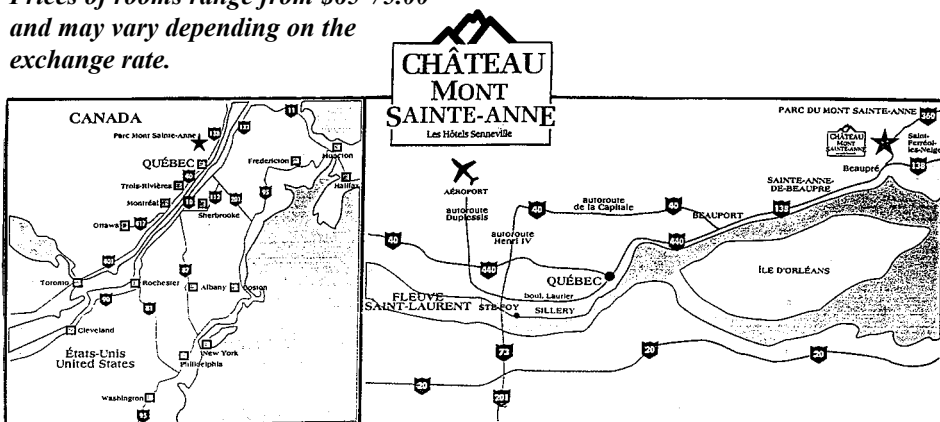
How to get to the hotel

From Quebec Jean-Lesage Airport:

Take the Charest Boulevard East, and Henri IV autoroute North and follow the directions Sainte-Anne-de-Baupré (Highway 40 East), which becomes route 138 East to Baupré. Take Mont-Sainte-Anne exit (360 East) to the Château Mont Sainte-Anne.

From the Pierre-Laporte bridge:

Take Henri IV autoroute North and follow the directions to Sainte-Anne-de-Baupré (Highway 40 East), which becomes Route 138 East to Baupré. Take the Mont-Sainte-Anne exit (360 East) to the Château Mont Sainte-Anne.



IAPP Quebec Convention Schedule

Tuesday, Oct. 12

8-10 pm - Registration open & Soda social

Wednesday, Oct. 13

8-10 am - Registration/Boutique open
Photo display set up

10 am - Coffee

10:30 am - Official opening of Convention

11- noon - Will Landon - From Cirkuts to Circuitry - Take advantage of the old and the new

12-1 pm - Joshua D. Eskin - Capture Techniques for Immersive Imaging

1 pm - Lunch Break / Optional separate luncheon for IAPP Spouses/ Companions

2-4 pm - New panoramic equipment demos

4-5 pm Panel - VR/Digital w/computer

5 pm - Dinner Break

7 pm - Exhibits open / Round Tables for networking

Thursday, Oct. 14

8 am - Registration/ Boutique open

8:30-9:30 am - George Pearl - Rotational group formation photography

9:30-10:30 am - Camera Workshops
1. Roundshot
2. Cirkut

10:30 am - coffee

10:45 am - Camera Workshops
1. Noblex
2. Handbuilt

11:45 pm - Lunch Break

1-5 pm - Guided Tour - Ile d'Orleans

7 pm - Exhibits open / Round Tables for networking

9 pm - QPP Test

Friday, Oct. 15

8 am - Registration/ Boutique open

9 am - IAPP Business Meeting and Elections

10:30 am - Coffee

11- noon - Joe DeRenzo - Digital Manipulations and printing

12-1 pm - Everen T. Brown - Panoramic Marketing on the World Wide Web

1-2 pm - Lunch Break

2-3 pm - Speaker - To Be Announced

3-4 pm - Speaker - To Be Announced

4 pm - Dinner Break

7 pm - Open House - for public / Exhibits open

Saturday, Oct. 16

8-9 am - Speaker - To Be Announced

9 am - IAPP Group photo

9:30-5 pm - Guided Tour - Old Quebec and surrounding area

6 pm - Reception

7 pm - Banquet

Sunday, Oct. 17

9 am - New Officers Board Meeting (closed working session)



Note: Schedule is subject to change.

Final schedule will be available at the Convention

Two Quebec Bus Tours Offered To Convention Attendees

On **Thursday, October 14**, from 1-5 p.m. there will be a guided tour of Île d'Orleans. The Island is a true open-air museum. Considered as one of the earliest settlements in New France, the Island boasts more than 600 heritage buildings. It is a quiet heaven of green amidst the waters of the St. Lawrence River and it offers some of Québec's loveliest vistas. There will be a stop for tasting a white wine produced on the Island at Le Vignoble de Sainte-Pétronille.

On **Saturday, October 16**, from 9:30 a.m. - 5 p.m. there will be a guided tour of Old Québec and surroundings. This will be a unique opportunity to discover what a

great city Québec City is. UNESCO has proclaimed it a World Heritage Treasure because of its unique architectural and historical value.

Considered as the cradle of French civilization in North America, the city is filled with beautiful panoramas that are just waiting to be photographed by the skillful members of our association. The tour will include a stop at one of the most beautiful waterfalls in North America: the Montmorency Falls that are one and a half time higher than Niagara Falls. Perched at the top of the cliff, the Manoir Montmorency offers a breathtaking view of the falls, the St. Lawrence River and the Île d'Orléans. ■

Convention Airfare Discounts Announced

Salt Lake Travel has been named the official Travel Agent for the IAPP Convention in Quebec, October 13-17, 1999. They have negotiated special convention fares with Delta and American Airlines. This will give you another 5% off the lowest fare if you book through them.

As an independent travel company they will search for the lowest fare from your hometown. You can reach them toll-free at 1-800-365-3514. Mention that you are with the IAPP GROUP and you will receive prompt attention and the IAPP Convention discounts. Plan in advance and save! ■

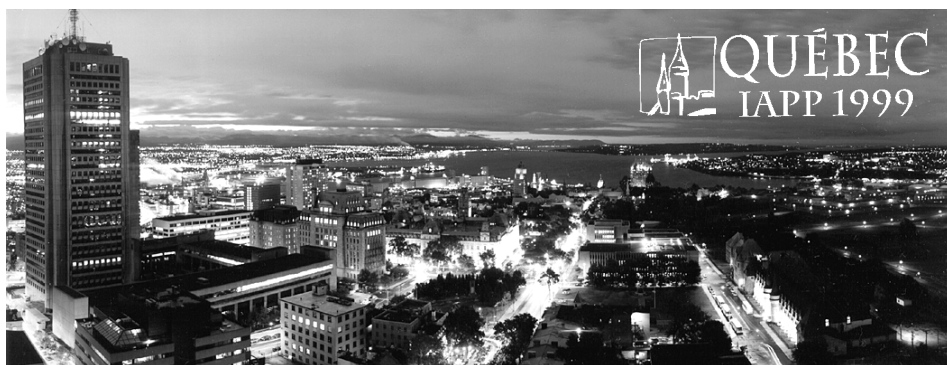


Table Top Displays & Sponsorship Opportunities at IAPP 1999 Convention - Quebec City

Every eighteen months or so, the International Association of Panoramic Photographers presents its Worldwide Convention. Members gather from a variety of countries, to learn more about this unique style of photography. Seminars, photo-shoots, and demonstrations highlight the activities that celebrate panoramic photography. Over 150 members attended our last meeting.

Promote Your Panoramic Products To This Unique Audience...

>>Reserve A TableTop Display for only \$80. Your table display will be up for three days. Tables are approximately six feet long. At breaks, members can peruse the displays. Each night, (7-12 PM) members gather to share stories and visit tables to see the latest products you offer!

>>Sponsor A Morning Coffee Break or Co-Sponsor IAPP Banquet - for only \$360 you can sponsor a coffee break. Coffee and donuts will be delivered to the room. Signage will be provided at the break area, your name will appear in the official program, and announcements will be made highlighting your generous involvement. The exposure is great!

Sponsors can also be a part of the pre-dinner refreshments at the IAPP Banquet. The choice is yours. IAPP takes care of everything. You benefit from the exposure.

We have a limited number of tables this year, so please sign up early. Payment is not required until September of this year. However, we need your reservation now so we can make the proper arrangements.

If you have any questions contact Everen Brown at 801-364-2642.

Fax or e-mail the following information to Everen to reserve a table or to sponsor refreshments.

I would like to sign up for _____ tables at \$80 each.

I would like to sponsor _____ coffee breaks at \$360 each.

I would like to co-sponsor the IAPP Banquet at \$360.

Also include the following information; Name - Company Name - Address - City - State - Zip - Phone - Fax - E-mail. ■



Panorama Contributions Sought

Panorama is a much more interesting magazine if there's something in it to read. So why don't some of our members write an article, share some expertise, a new perspective, or a travel tale? And just think of the satisfaction you'll get out of seeing your work in print! Besides that, you get a point towards your Qualified Panoramic Photographer certification!

Submission Guidelines can be found on page 16 of the April 1999 issue of *Panorama* and online at: <http://www.panphoto.com/SubmissionGuidelines.html>. ■

Convention Speakers

By Liz Hymans

Our speakers this year reflect the increasing use of computer technology that is going on all around us. However, our old-fashioned cameras and store of knowledge and experience are not obsolete - they are valuable. I'm hoping our old dogs can enjoy the new tricks, and the young technocratic pups will learn from the old dogs.

Here's our topic/speaker list as of press time; we'll have more by October.

PANORAMIC MARKETING ON THE WORLD WIDE WEB -

By Everen T. Brown

Everen takes us on a wild ride of the wild side of the World Wide Web. He'll tell of ways to market yourself and your panoramic photos with new and interesting twists on the Internet. From selling prints to stock photography, you will learn new ideas to increase your panoramic photography business or even start one! Grab your keyboard and get ready to go surf in' for profits!

Everen T. Brown has been an IAPP member since 1987 and has produced two panoramic books, "Panoramic World" and "Circumnavigation Antarctica". His travels have taken him to over 100 countries on all seven continents, producing one of the largest collections of 360-degree panoramic photos. His photos are featured in a variety of CD-Rom products and publications worldwide. As a regular columnist of *Panorama* magazine, his "Thinking Ahead" column helps members stay on top of the fast changing world of panoramic photography. Everen is also an IAPP Board member and Membership Chairman.

Note: Everen's presentation will be on

video, as he regrettably has a scheduling conflict and was irreparably committed to a meeting in Europe. His presentation will be illustrated with photos and website samples.

DIGITAL MANIPULATIONS AND PRINTING - By Joseph DeRenzo

Both digital printing and the preliminary computer manipulations have come a long way since their inception. In this presentation, Mr. DeRenzo will show original images as captured, describe the manipulations he performed with his computer, and show final prints. The manipulations include color correction options, density and contrast control techniques, matting one image on top of another, and adding text and graphics. He will also discuss expanding the use of the Noblex for 360 degree images, and the latest computer imaging software as presented at Seybold in September, 1999.

Joseph DeRenzo, along with John Gateley, is a co-owner of Panoramics Northwest, formed in 1997. They shoot stock and assignments with a broad arsenal of cameras including the Noblex, V Pan, Hulcherama, and their new adaptation of the Canham 5" x 7" with interchangeable lenses and a V-Pan roll-back. Mr. DeRenzo worked several years in a color darkroom starting in the early nineties. Recognizing the potential of the digital world, he taught himself everything from the basics up to the latest Photoshop 5.5 manipulations, and is also up to speed on the latest printing technologies. Through Panoramics Northwest, he provides a full line of digital services: image capture, scanning, manipulation, and output. Other

panoramic photographers frequently use his skills for printing and scanning, QTVR authoring, and website construction.

CAPTURE TECHNIQUES FOR IMMERSIVE IMAGING -

By Joshua D. Eskin

Immersive Imaging is a way of viewing panoramic scenes interactively on a computer screen. It represents a real paradigm shift in the world of panoramics: the computer lets us go inside the scene, viewing it in natural perspective as if we were there. Creating an immersive image does not need to be difficult or expensive. We will review the various techniques for producing immersive images: scanning existing panoramic photos, stitching together a sequence of standard photos, using specialized curved-mirror and fisheye systems, and the new digital scanning panoramic cameras. Each type of image capture has its advantages in price, image quality, and post-processing time. We will also briefly review the software that is currently available for manipulation and viewing of immersive images.

Joshua D. Eskin is the President of Panoptic Vision, a Colorado company that designs and builds digital panoramic cameras. He received his Ph.D. in Optical Sciences from the University of Arizona and a Masters Degree in Electrical Engineering from Columbia University. For five years he was a research scientist at Philips Electronics where he designed optical paths for liquid crystal video projectors. In 1998 he founded Panoptic Vision. Josh has been an IAPP member since 1997.

FROM CIRKUTS TO CIRCUITRY - TAKE ADVANTAGE OF THE OLD AND THE NEW - By Will Landon

A combination of older and current technologies takes advantage of the new digital advances to get better photographs. Will describes the niches where old technologies can't be beat, and tells how the new technologies, namely digital, can solve problems for the older technologies. Mr. Landon's strong technical background, analytical mind, and love of the out-of-doors make all of his presentations delightful.

Will Landon has published seven panoramic posters and two books containing many panoramic prints. He has written many IAPP magazine articles on a variety of subjects. An IAPP member since the 1980's, he has attended every convention since Yellowstone in 1990.

ROTATIONAL GROUP FORMATION PHOTOGRAPHY - By George Pearl

In a valiant attempt to re-invent the art of the group formation picture, Pearl takes it one step further by shooting a formation in a 210 degree rotational arc! The Group Formation Panorama's design, layout, shooting, production and sales, will be covered in full detail by Pearl describing his first attempt at this unique area of panoramic photography.

George S. Pearl of Atlanta, Georgia USA, has a BS Degree in Radio, Television & Film from the University of Southern Mississippi. He has been a medical photographer, an aviation electronics technician in the US Navy, and a Qualified Evidence Photographer and a

Speakers continues on page 6

Speakers from page 5

Certified Professional Photographer with the Professional Photographers of America. Pearl is a Board Certified Evidence Photographer, past president, the 1989 recipient of the Evidence Photographer of the Year Award, and a Fellow of the Evidence Photographers International Council. His 21 year old photography company is called ALPS - Evidence & Photo. Pearl added the "Atlanta Panorama" division to his firm for his own happiness. Now he sees hundreds of smiling faces as a change from the stringent evidence production for which he is internationally known.

Equipment workshops and discussions at Convention

Inventors and dealers will be demonstrating the newest, latest, greatest panoramic equipment: Panoscan, Hasselblad X-Pan, Panoptic's camera, and a new hand-built camera will be shown

during our New Equipment Demo. We'll see how the cameras work, view samples of their imaging capabilities, and have time to talk with the reps and inventors.

We will also have User Workshops for Noblex, Roundshot, Cirkut, and Handbuilt cameras. IAPP members talk with other users of their particular camera type and share problems and solutions. ■

Print Judges Announced

By Bob McIntyre - Print Chairman

I am happy to announce the judges for the print completion at Quebec. They are Peter Lorber, Ed Segal, John McCarthy and Bruce Boyle. This is a good panel of judges and they will do a great job. ■

Rule Changes For The Print Competition 1999

Bob McIntyre - Board Member - Print Chairman

The board has changed a few rules for the print competition after the Moab meeting. There will be a new category for group photos and the digital category will be divided into enhance and altered. In the altered category a print around 10 inches long is required of the picture before is altered. There are five categories now: straight back, swing lens, rotation, group, and digital.

The maximum length of a print is 48 inches, including the matte. The maximum length for contact prints from a Cirkut camera is 60 inches, including the matte. No framed pictures are permitted. No signatures on the prints will be allowed. Prints with a signature will not be judged but put in the general display. Numbers will identify all prints. Pictures in frames will not be judge or displayed.

There will be four judges and a Print Chairman. Judges may not enter prints for judging, but may put prints up for general display. The prints will be judged the second day of the convention.

All photographs must be taken within the two years prior to the convention. You may enter one print on each of the categories you qualify for.

The IAPP and our hotel will not be responsible for loss or damage to any print. Any member entering prints for display or competition assumes full responsibly for their prints and releases the IAPP and our hotel of any kind of liability. ■

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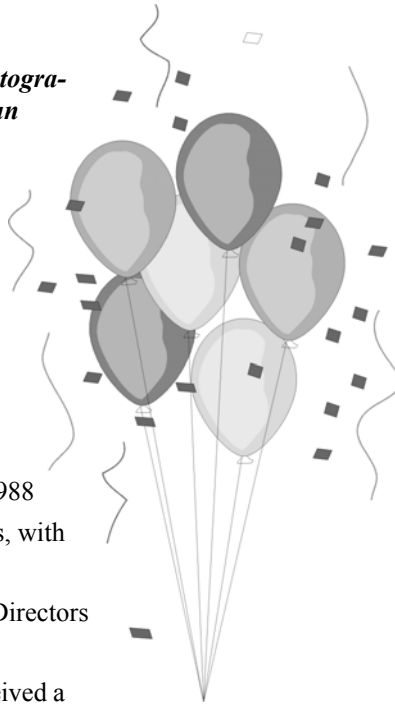
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IAPP Celebrates 15 Years

1984-1999

The International Association of Panoramic Photographers is 15 years old this year! Below are some fun facts about our organization.

- First convention April 1984 in Hampton, VA - 35 members + guests.
- 10th convention in Moab - 130 members + guests, largest convention to date.
- The first convention was about cirkut cameras today we have expanded to electronic and digital cameras.
- First issue of our magazine was 4 pages and in 1988 we had two advertisers, today we average 28 pages, with color photos, and have 17 advertisers.
- In 1993 we established our first IAPP Board of Directors and Bylaws.
- We became affiliated with PP of A in 1994, received a Panoramic Photographer classification from PP of A in 1997 and we established our own Qualified Panoramic Photographer program in 1998.
- Just a few of our charter members are - Colin Bullard, Ron Klein, Mark Segal, Bob Lang, Dave Orboch, Kornelius Schorle, Fred Yake, Dick Fowler and Harold Lewis.
- We started with about 50 members and have grown to almost 600.



1st Meeting Of Panoramic Photographers Hampton, Virginia April 28 1984

IAPP - 10 Years

Below is an excerpt from the story written by Richard Fowler on IAPP's 10th birthday.

The first meeting of IAPP was held April 27- 29, 1984 at Hampton, Virginia. It was through the efforts of Jeffery Aldrich and the Images Lab that all their panoramic customers and other known panoramic photographers were invited to attend. And attend they did from all over the USA.

I wish I had a list of the names of all 35 photographers and family members who attended. As I sit looking at the Cirkut photograph that was taken by E. O. Goldbeck, I recognize quite a few faces but others I can't recall the names. To name a few; Ray Herbert, Phil Foss, Charles Hulcher, Stephen Loftus, Jim Lipari, Jack Davis, Richard Fowler, Ron Klein, David Orboch, Harold Lewis, Jack Rankin, Mark Segal, Ed Segal, David Paskin, Bob Lang, Myron Wright, Charles Stover, Ed Goldbeck, Jeffrey Aldrich and E.O. Goldbeck. Unfortunately we do not have a left to right identification.

The meeting was very successful and the desire was there to form a group to keep in touch with each other and share knowledge about the panoramic format. I volunteered to help get the organization started and keep it going by writing letters and finally a newsletter.

Our next meeting was held in Orlando, Florida, February 6-9, 1985. I was the chairman and that meeting was one of the great ones with a registration of 105. The speaker list was a who's who in panoramic photography. Colin Bullard from Sydney, Australia came the furthest. E. O. Goldbeck was scheduled to be our featured speaker but unfortunately he was too ill to attend. Harold Lewis became our president. Great enthusiasm was generated to expand our group and have annual meetings.

From there IAPP has had slow steady growth. In the spring of 1986 we all traveled to Las Vegas, Nevada for our third meeting. Our fourth meeting was held at Annapolis, Maryland. Our fifth was held at West Yellowstone, Montana. For the sixth meeting we traveled to Banff, Canada and our seventh to Bar Harbor, Maine. ■■■

As you notice in the group shot below, Mr. Goldbeck was not right beside the rest of the group. The reason was, that while running to get in the photo after starting the exposure, he stumbled and almost didn't make it to the group in time. That's also why some of the people on the right side of the photo are blurred, they looked over to see if he was ok.

Goldbeck Co.

Extending the Panoramic Tradition

By Mike Westmoreland

When I gave the opening talk at the Peyresq meeting the main thrust of it was to explain how I came to be interested in what I call "the extended image" (my preference to the word "panorama"); how in my case this has occurred through a lifetime of practice in the visual arts; and how I had been able to link in and learn from the history of graphic art going right back to cave paintings. Talking afterwards I was reminded that many members (probably a substantial majority) have come towards an interest in the subject of panoramic photography from totally other directions, (e.g. engineering and technical professions,); and I realized therefore how new to them such information was. Bearing this in mind, it may be worthwhile to spend some time looking at the long history of related imagery, particularly where it predates the invention of photography.

What I concentrated on at Peyresq was an explanation of the crucial effect Giotto's invention of perspective (circa 1300 AD) has had on nearly all subsequent pictorial art and media: and how it influences content by imposing all manner of conven-

tions about composition (which are often mistaken for Rules). I gave a quick survey of the freedom from all such conventions, (especially from framing and format),

which existed pre-Giotto: e.g. the Bayeux tapestry (150-1 ratio), Byzantine Mosaics, Trajans Column, Egyptian pictographs etc. What I had also intended to touch on, but ran out of time,

was the extraordinary range of panorama-related activities which occurred in the two or three centuries immediately preceding the invention of photography and the interest in 360-degree painted panoramas which were so much in vogue during the 19th century. This will be the subject of the rest of this article.

I have been privileged in learning about this aspect of art because the UK seems to have been the center for a small group of

scholars and collectors whose passionate interest brought about a unique exhibition at London's Barbican Centre in 1989 called "Panoramania". This was a one-off

The word panorama seems to have been coined by a Scotsman, Robert Barker from the Greek words "all" and "view", and was first used by him in publicity for his painting of Edinburgh made on the inside of a large cylinder and exhibited in that city in 1788.

job that brought together under one roof an extraordinary collection of images from round the world, the diversity of which had never been previously

seen. Because of the fragile nature of some of the exhibits (e.g. some of them could only be seen under low light because of fugitive color fastness) it is unlikely such an event will ever happen again. While the large majority of exhibits were graphic rather than photographic, there was a small section on panoramic photography, and I count it an enormous privilege to have been an invited contributor. The exhibition was all the more remarkable

because it succeeded without being able to show many of the more spectacular examples of panoramas which have disappeared, or been destroyed, or are simply untransportable because of size. In such cases, ingenious use was made of illustrations, simulations and other exhibition designers' techniques, which gave an idea of the trouble that such things have often entailed. Before the invention of the 360-degree rotunda, there were many painstaking panoramic topographical records made by draughtsmen and engravers, especially of cities, and copies of these are still inexpensively purchasable to this day. Some of them are meant to be scrolled through rather than seen in one piece; others are less concerned with strict visual verisimilitude, and have a more playful character like a children's board game; e.g. a journey from London to Hong Kong which embodies a kind of linear panoramic effect. A more sophisticated relative of all this was the Diorama, which was a theatrical event requiring specially constructed premises and involving enormously elaborate large scale illusions of places and events. Commonly

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employed were ingenious lighting effects, travelling backgrounds, sounds, music, the lot... all this two hundred years before our own versions of VR. Daguerre himself was a master of these techniques before he got down to the trivial business of inventing photography along with Niepce and Fox-Talbot

The word panorama seems to have been coined by a Scotsman, Robert Barker from the Greek words "all" and "view", and was first used by him in publicity for his painting of Edinburgh made on the inside of a large cylinder and exhibited in that city in 1788. He also took out a patent on the idea. The high vantage point favored by him and by many subsequent panorama painters seems obvious to us today, but one which may point up the interesting fact that all this more or less coincided with the very first hot air balloon flights by the Montgolfier brothers. Barkers idea led to the establishment in London of the first rotunda or special building devoted exclusively to the showing of 360-degree panoramas, and the programme changed, cinema style, as fast as new ones were painted. The idea caught on in a big way and similar rotundas were constructed in various cities around the world. The impetus was more educational than anything else and people would pay to see them broadly relative to what they learned from the experience. For the first time, people who had never traveled further than a few miles from their homes could see what places thousands of miles away actually looked like. One of the biggest problems facing the organizers of the Panoramania show was that much of the material which had been generated over a couple of centuries had simply not been

preserved. The origins and the impetus which had created it all in the first place were different from the High Art which fills our museums and galleries, (and which has largely been maintained by the churches, and wealthy patrons). Not only was this stuff on a vaster scale, but it had its roots in entertainment and spectacle: it informed a public which had received no previous visual education about the wonders of a broader world which only a few seafarers had been able to describe in words. In the case of material which was prepared for exhibition in specially-constructed rotundas, the paintings often wore out with travelling and redisplay, and in any case the public acquired a thirst for changing stimulus just as modern cinema audiences do. Perhaps the whole business reached its pinnacle in a huge building in London's Regents Park, where the whole audience of two hundred people could be revolved on a turning stage, and this could reputedly be operated by a small boy turning a handle. The building exists to this day, albeit for a totally different purpose, but the apparatus has sadly long since disappeared. There have been modern painted panoramas made around the world and rotundas built in quite recent times, but opinion is divided on their merits and significance in this era of massive image proliferation.

It is worth reflecting that two centuries ago artists deemed it imperative that the 360-degree panorama should be viewed as it existed in relationship to the turning viewer and went to inordinate length and expense to create such an environment.

*Extending Tradition
continues on page 10*

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Extending Tradition from page 9

Yet here we are turning out these things with all our expensive cameras but (the VR fraternity apart) we persist in asking the world to view them flat on the wall like some kind of photographic equivalent to the bearskin rug. When I first started making Cirkut pictures 25 years ago I constructed some giant lightboxes with 8 foot by two foot perspex fronts curved around 90 degrees to show the results at Londons Photographers Gallery and I still regard those as the best panoramic exhibits I ever made (even though the taking arc of some pictures was much greater than the viewing arc). The reason I didn't keep the idea going was that I was showing the unrepeatable and uncopyable original transparencies and the risk to my investment from heat, UV light, and accidental damage was eventually too much to tolerate.

My experience is that some viewers are often more frankly puzzled than amazed by the strange convolutions of cylindrical perspective when laid out in front of them. As someone who has been making this stuff for over a quarter of a century, I long ago ceased to think it was a big deal, and am still surprised to find there are people around who think it is; (but I don't say that to rich customers). Surely the truth is that as people get more used to seeing pictures taken in this way through the growth of panoramic photography they will cease to be interested in the mere novelty of it all and start asking for images which are more immediately meaningful and significant content-wise. A final thought: perhaps one of the challenges facing future IAPP conventions is to have less talks on technical gizmos and more frank discussions about the images we make. ■

4th Street Gallery Visits

By Kevin Kapp

Last week Jim & Annette Schwabel, IAPP members from New York were in Chicago at Panoramic Images, scouting out rural locations for their work. They contacted me to stop in and see the 4th St. Gallery in Dubuque, IA. I suggested a day in Galena, IL, which they found very quaint. I said be sure and stop in at the Old Time Photos Studio on Main St. and speak to Jim Martin a camera collector, you may find that special item you can't find anywhere else in the world. The next two days were filled with foul weather, tornado watches and warnings, rain and flash floods in the Tri State area. The Schwabel's headed back east after getting a little photography in when the sun happened to pop out. I was thrilled to have fellow IAPP members stop by and get a good look around the gallery. Hope to see them again on their return trip in July.

So the story goes, Jim Martin called up yesterday and said I'm sending over a photographer who is visiting from France. Timothy Mason from Paris, France is in the Midwest for 4 months based in Chicago. He is driving around the heartland shooting street scenes and urban landscapes involving people and their reaction to their surrounding and the panoramic camera. Tim Mason born in L.A. California, raised in Belgium, living in Paris received a grant from the French



Ministry of Culture to help in his stay in the U.S.A. Tim hopes to put together a show of "Panoramic Images of the USA" at the Gallery MichelRein in Tours France upon his return. By the time this is in *Panorama* some of Tim Mason's panos will be online at <http://www.a-vous-de-voircom/USA360>. Check it out.

Tim built his own 35mm panoramic camera based on a Nikon FE body with a 17mm Tokina lens. His camera is designed after Michel Dusariez 35mm motor driven cameras, synchronized movement of both film and camera. With the 17mm lens the image is about 10.8 cm long, easily contact printed or enlarged. Tim has selected Kodak 160 color negative film because of it's latitude on exposures. Good luck Tim.

It was great fun to have these visitors to the 4th St. Gallery. I hope to see Tim join the IAPP upon his return to Paris. As we sat in the garden looking over the latest issue of "Panorama" he was telling me of Peyresq and it's beauty. I'm also looking forward to the Schwabel's next visit (I'll see what I can do about getting you some sunshine and big white puffy clouds). We welcome any and all if you come to the Tri-State area. 4th St. Gallery is at 486 W. 4th Street, Dubuque, Iowa 52001. Phone 319-584-2346. ■

Below: One of Tim's panoramas.

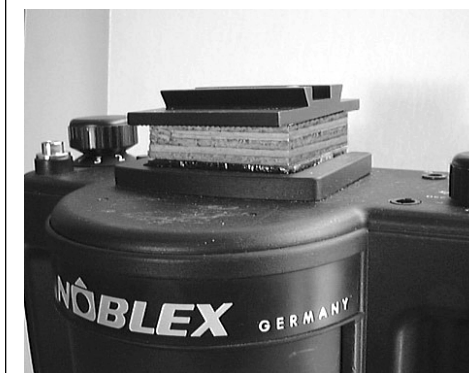


Shooting The Noblex Upside Down

By Will Landon

Use Linhoff quick release plates on the camera which maintains position when you remove and return the camera to the base mounting system. Other quick release

systems will probably work just as well. Fasten the plate to the bottom of the camera so that it is pretty rigid. Compose your picture and instead of allowing for the shift up, estimate the shift down. Now remove the camera and replace it with a wood and plastic adapter that also is on a quick mount plate. The adapter slides smoothly into the viewer shoe of the Noblex, after you have removed the viewfinder. Now the Noblex is upside down, and can be rotated for 360's. ■



Integrating Panoramic Photography and the Digital World

By Joseph DeRenzo

We shouldn't be surprised at how fast things in the photographic world are changing, and that goes for panoramic photography as well.

Digital capture, manipulation and output to print media or to the web are fast becoming the norm. Whether your images are created on film or in a laptop, these changes can only expand the possibilities of communicating our ideas more effectively.

1. Digital Capture. As many of you know, the Panoscan is evidence that creating panoramic images without film is not only here, but here to stay. Many 360 images for the web are being captured on consumer grade digital cameras and stitched together with a wide range of software applications. Film scanners continue to be improved and produce quality hi rez image files with uncompromising accuracy.

2. Digital Manipulation. With the release of Adobe's Photoshop 5.5, which also includes Image Ready for the web, we have yet another sign of the improvements taking place in the realm of software applications. Just as important are the color management applications such as Agfa's Color Tune which makes it possible to accurately reproduce color for photo print or four color press.

3. Digital Output. It is reassuring to know that all of our hard work in capturing and optimizing images can be presented with the accuracy photographers' demand. Printing devices, namely the LightJet 5000, bring us full circle from the initial focusing on a subject to the final

form of presentation.

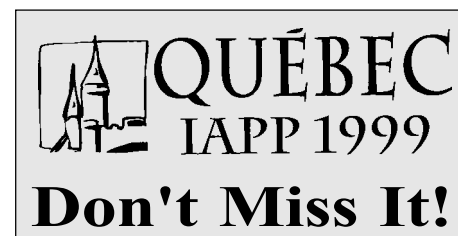
Image Ready software makes it possible to maintain color accuracy for presentation on the web.

With all these advances in technology at our disposal, the question then becomes "How do we integrate Panoramic Photography and the Digital World?" The answer is by simply using the technology. To the degree with which one uses that technology is up to the individual photographer.

From repairing dust and scratches to stitching images together the digital world offers many practical solutions including independent color control of individual elements of an image. Expanding the tonal range of an image by scanning one print exposed for the highlights and the other for the shadows, then layering them together seamlessly to create an image file for the LightJet, is a common process.

Creating full 360 images with the Noblex and other type cameras offers photographers another avenue for utilizing QT-VR technologies for the web and CD roms. Adding text, graphics and copyright information to images is useful for photo prints and images created for four-color press and the web.

These advances in digital technologies will be covered in greater detail at the IAPP Convention in Beaupre, Quebec. ■



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Virtual Reality, Real Trouble

By Craig Bicknell - Wired News

Panorama Editor's Note: There has been a lot of heated discussion lately in the VR world about IPIX and their tactics to enforce their patents on technologies used for creating specific types of VR images. The story below, re-printed from Wired News, is one of the best (and non-biased) articles I've seen on the issue.

Wired News Editor's Note: This story has been updated with additional comments from attorney Robert Sachs. Also, the original story misstated the amount of cash the company had on hand. That figure has been corrected.

By all accounts, Interactive Pictures has some pretty cool virtual reality technology.

Using the company's IPIX software, VR photographers take wide-angle photographs and stitch them together into 3-D panoramas that Net surfers can figuratively step into.

Enter an IPIX "photobubble" of Yosemite National Park, for example, and you can marvel at soaring El Capitan, then wheel around and check out the oak tree right behind you. You can stare straight up into the sun, or inspect the grassy turf at your feet.

IPIX has patented its technique for creating the bubble images, and sold both its software and finished photos to customers in the real estate, travel, and e-commerce industries. While it's still losing money, IPIX hopes to parlay its technology into a US\$67 million initial public stock offering the first week of August.

There's just one problem, say IPIX competitors and VR developers. The patent that IPIX has built its business around is bogus. Worse yet, foes say, IPIX

has filed a string of lawsuits alleging patent infringement, stifling the entire industry, and alienating the developers and photographers it needs to survive in the long run.

"People hate them," said a highly respected VR developer who declined to be identified. "The legitimacy of their patent is zero, and they're going after anyone who's trying to make improvements."

The furor in the VR community came to a head in April, after an IPIX lawyer sent a threatening legal notice to German physics professor Helmut Dersch, accusing him of illegally posting an IPIX photo of the Grand Canyon.

It turned out that Dersch had created the image using software he had designed as a hobby. He fired back a nasty note and published the IPIX letter on his Web site. He then kept a public chronicle of the ensuing exchanges.

The IPIX letter to Dersch, coming on the heels of previous IPIX legal action against corporate competitors, outraged many VR developers. One group organized an IPIX boycott, and mailing lists bristled with invective against the company.

"To invest in IPIX, in my opinion, is to invest in doing business with the devil," wrote one VR photographer.

IPIX declined to comment in detail about the controversy, citing the Securities and Exchange Commission requirement that limits communications prior to an IPO. In a brief statement to Wired News, it said it was working toward an amicable resolution with Dersch. "However," the statement concludes, "the company, with firm patents in place, is also required to protect its proprietary information."

IPIX was granted the controversial patent back in 1993, when it was going by

the name TeleRobotics International. Essentially, the patent covers spherical images created using fisheye camera lenses. Using a fisheye lens, a photographer can shoot a 180-degree image, or all of the scenery in a half-sphere in front of him. IPIX's software lets photographers weave two complementary 180-degree photos into a 360-degree panorama.

The problem with the patent, say experts, is that the techniques it covers were well known and well publicized years before the patent was granted.

"Cartographers and photogramatists have been familiar with the principles of image projection onto three-dimensional surfaces for years," said Andrew Davidhazy, chairman of the department of imaging and photographic technology at the Rochester Institute of Technology.

In particular, a widely read 1986 academic paper published in an Institute of Electrical and Electronics Engineers journal covered all the basic techniques later patented by IPIX, experts say.

Because there was substantial "prior art," IPIX competitors contend that the patent does not stand the test of law.

That's what David Ripley, CEO of IPIX competitor Infinite Pictures thought, anyway. When IPIX sued Infinite Pictures in 1996 for patent infringement, Ripley confidently headed to court in IPIX's home state of Tennessee.

To Ripley's dismay, a jury found in favor of IPIX and ordered Infinite Pictures to pay \$1 million in damages.

"We went to trial against a Tennessee company before a jury of Tennessee folks," he said. "We had a biased jury, but frankly, in their defense, patent law should never go before a jury. Those people's

eyes were glazed over, and they didn't have a chance of understanding what was going on."

Infinite Pictures plans to appeal to the Federal Circuit Court this fall, and Ripley is confident his company will prevail.

He may have cause for optimism, patent lawyers say.

"The federal appeals court often overturns jury cases," said Robert Sachs, a partner in the intellectual property division at Fenwick West, a Palo Alto, California, firm that specializes in law for high-tech companies.

Nevertheless, Sachs said, the court tends to be deferential to the jury decision, because the jurors heard and evaluated all the experts and witnesses.

The IPIX patent, he said, is written in broad language that is subject to interpretation. The drafter of the IPIX patent didn't specify precisely how the components of the patented IPIX system interconnect, instead using general language such as "means for receiving digitized signals."

The appeals courts have tended to find that such patents apply only to the relatively narrow range of techniques the patent holder actually employs, Sachs said. Because IPIX accused Infinite Pictures not of literally infringing on its techniques, but of making equivalent technology, IPIX may have a hard time in the appellate court. It will come down to a battle of experts, Sachs said, noting again that the appeals court has tended to defer to the jury ruling because the jury saw and weighed all the expert testimony.

Still, he said, "I would not want to bet a company on this patent."

But IPIX has bet its future on the patent. If it loses, it could be in big trouble.

Cirkut Calibration

Get ready for a round of true frustration.

By Ron Klein

Actually it isn't too hard to adjust the governor on a #10 cirkut. First you should totally disassemble and clean the entire camera, but if you are in a hurry, this is what I would do.

Run down the motor and check the end play in the governor. This is adjusted by loosening the nut on top of the governor and screwing in or out the screw on top. Don't tighten it too much. The original factory setting was quite loose (noticeable endplay). Toward the top of the ball springs you will notice a small collar with two setscrews. This allows the ball spring assembly to move up and down. First, set the speed selector to the slowest speed (one half second). Then slightly loosen the setscrews on the collar and move it up or down to achieve the right speed for one half second. This is trial and error with a lot of tries. It is a good idea to adjust the speed selector up and down after making an adjustment and start and stop the motor a couple of times before timing the speed.

Determining the speed is easily done by timing say three revolutions to get a good one drum revolution speed. Then use this simple formula in the next column for calculating the speed:

$$\frac{\text{drum circumference}}{\text{time one revolution}} = \frac{\text{slit width}}{\text{effective shutter speed}}$$

The drum diameter of a #10 camera is usually 3 5/8 inches or 11.39 inches.

The slit width is usually 1/4" or .25 inches.

In other words, (time of one drum revolution) times .25 divided by 11.39 = effective shutter speed.

The real frustration comes after getting the 1/2 second speed adjusted properly. It is then that you notice that the other speeds are not correct. The problem is not easily fixable. The ball springs have lost the original tension and allow the balls to spin at a different speed. This can be fixed by making new springs, but only with great difficulty. For myself, I need a good slow 1/2 second, and anything after that is negotiable. If you know that 1/10 is actually 1/15 is that so bad? And you might get lucky and have a camera that will actually adjust to ALL speeds correctly. Most cameras are within 20% of the right time, and you should be able to hone that to 10% if you're fussy.

I cannot over emphasize that in order for a #10 camera to run right, it must be thoroughly cleaned and oiled or you don't have a chance of keeping the previous adjustments.

Remember: Graphite powder is for lubrication of the main spring ONLY. If the spring is oiled it becomes temperature sensitive and will not run well when cold. If you remove the cover of the spring housing and it hasn't been oiled by a past owner, then leave it alone. It is a real job

getting the spring out and cleaning it and re-graphiting it as it is put back in. You can easily tell if oil has been added. Graphite looks like little flakes, oil is crud, and of course OILY. Be sure to match the scratch marks on the side of the housing so the cover is properly placed.

When reassembling the spring housing there's a plate on top; held by three posts that slips over the spring housing. A very small drop of oil applied with a small brush there is more than enough at this point. The mainspring is at its most power there so it really doesn't make much difference as to friction. It isn't a bearing surface. The plate is punch marked, make sure that the mark is pointing away from the geartrain.

The brass gears themselves should run DRY and as clean as possible. Oil is applied to the journal shafts, and very sparingly. Again use a small brush to apply less than a drop, then wipe up the extra after a quick run. Oil attracts dirt. If the gears are lubed then the chance of something getting stuck in the gears is high. I also take masking tape and seal the upper plate to the base plate to keep as much dirt and whatever away from the gear train. More than once I have seen small bits of paper leader mashed into the gears. Ever wonder why you have banding?

A reasonably good oil to use for the cirkut is simply sewing machine oil. This is a little heavy, but most people use the camera on nice summer days, so no problem. At zero degrees or colder like we get in Alaska, forget oil altogether but oil when it warms up. ■

Unlike most software companies, which simply sell their products for a one-time fee, IPIX has built its business around a per-use model. Every time a photographer uses IPIX software to save an image, he has to pay IPIX up to \$25, depending on whether the image is of high or low resolution. The fees have previously ranged as high as \$100.

It hasn't yet become a profitable plan. IPIX had a loss of \$13.2 million on revenues of \$2.7 million in 1998. As of 31 March, it had an accumulated deficit of \$27.7 million.

And it expects the losses to increase after the IPO, as it expands its sales and marketing efforts.

At the moment, many photographers are willing to pay the fees, if grudgingly, because IPIX is the fastest, easiest way to make a spherical image.

"Their advantage is ease of use," said Scott Highton, a pioneering VR photographer who helped both IPIX and Apple Computer develop VR software. If there were any viable alternative, however, even if were more cumbersome, photographers would gladly take it, he said.

Viable alternatives may be on the way — whether or not IPIX prevails in its patent suit. Several companies, including Infinite Pictures and Panoscan, have introduced new technology that lets users create spherical images without using fisheye lenses.

"There are other kinds of technology that can provide better virtual environments," said Ken Turkowski, a senior research scientist at Apple Computer and a virtual reality pioneer. "IPIX can't touch those whatsoever." ■

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Rotation Specialties Cameras

By Dr. Steven Bein

Several years ago, I was fortunate to meet Bruce Klein, the creator of Rotation Specialties, its machinist, engineer and sole proprietor. Bruce has a high Photo IQ, especially in panoramics. I eventually bought two cameras from him and my friend, Carole, bought another one. My Rotation Specialties medium format camera was originally made for a 55mm Mamiya 645 lens but now has two lenses, the 55mm (12 3/4" film draw) and a longer 80mm (20" film draw for full rotation). The camera is constructed with a rigid and solid ABS plastic body with metal gears.

Each time Bruce and I would get together and discuss changes or alterations to the camera, he would improve it and make additional changes. We kept having new ideas and he kept meeting and exceeding the ideas and expectations. The camera has speeds from 1/30 to 4 seconds, using high and low speed dc motors. It takes 220 film and is a very simple and exact machine. I have used it on Grand Bahama Island, Florida locations and the California trip. Some of the photos taken at Grand Bahama Island were in the December issue of *Panorama*. The rotating camera consists of three main parts, body, base and the power supply.

There are also two interchangeable capstans for matching film draw length to each lens. I fitted the foam in a hard Dorskosil waterproof case to hold the camera and accessories and attached a RRS quick release plate to the base to match my tripods.

To date, I have had fantastic results with the camera.

Last year, Carole and I traveled from Los Angeles to Yosemite, across Tioga Pass to Mono Lake, then on to Death Valley. We timed our trip to attempt to make the most of sunrise and sunset. I mainly used my 35mm and 4x5 in Yosemite, reserving the panoramic for Mono Lake and Death Valley. We arrived at Mono Lake before sunset, took photos from an easy vantagepoint, and then returned before sunrise the next day. We had a fun time. I was carrying about 75+ pounds of cameras, three heavy tripods and accessory equipment. Carole carried her 35mm setup only. We went down to the shore and set up. Due to the hour, light and aperture settings, my panoramic shots took about 3 minutes each, therefore leaving time to shoot 35mm and 4x5. It took a lot of work and keeping alert to watch the panoramic camera as I was working the others. Anyway, the results

were successful.

Humorous anecdote: I returned to the car. Walking a half-mile uphill with all that weight a few hours after carrying it down proved more difficult than walking downhill to the shore. After I packed the car, I used my walkie-talkie to call Carole. She radioed that she was lost near the shore and asked me to save her. I went back, but couldn't find her due to the high vegetation and tufa formations.

She finally got the idea to raise her hat on the end of her extended tripod and we found that she was less than 30 yards from me. I helped her carry her equipment to the car.

We drove to Death Valley arriving too late to shoot. The next morning, we got up early for sunrise and were greeted with a glorious firebright morning sky as we walked into the Stovepipe Wells sand dunes.

Just as the sun rose above the mountains, it went behind the clouds and we lost the contrasty sidelight we had desired. C'est la vie. We were both tired and decided to return to Los Angeles.

We left via the Panamint Valley and took hours to photograph the scene and enjoy the views. It was a wonderful, though rushed trip. The cameras worked



well and we had good results to show for the trip.

Bruce Klein also made a fixed back panoramic camera for me. He had parts for a 6x24 back for an old Deardorf and he assembled them into a camera for me. I like it. Bruce has sworn off fixed back cameras, he now makes only rotational cameras. He has been a fountain of knowledge regarding rotational panoramics, exposures, composition and other photographic areas. I have been lucky to have him as a friend and mentor.

Rotation Specialties phone number is 310-536-6741. ■



Above: One of the Rotational Specialties cameras built by Bruce Klein.

Left: This panorama was taken roadside, near Bishop, California.

A Different View

By Fred Yake

When we think about a panoramic view a horizontal image comes to mind, possibly shot on a #8 or #10 cirkut. We live in a time when our panoramic cameras are far more versatile than a cirkut camera. I have used a #10 for 20 years in my work and it is still the best choice for me in certain job situations. But with the newer rotational drum and flat plane cameras, vertical views can add a dimension that only a panoramic image can convey.

For scenic images verticals can include more of a beautiful sky as well as including a river, colorful rocks and flowers, etc. Verticals allow the option of including more sidewalk or more tall buildings depending on your point of interest. As in the, approximately 160 degree view of balloons in Albuquerque (next page), this angle shows people and balloons on the ground and adds a feeling of space, by being able to see under the balloons directly overhead.

Interior shots are a great place to shoot vertical panoramas. There are beautiful ornate ceilings, skylights of stained glass, paintings or chandeliers. This type of view also adds to the spaciousness of a high ceiling room or rotunda. You don't need to shoot 180 or 270 degree verticals of views of only 120 to 150 degrees can be very dramatic.

We should view the scene in both angles or we may miss a special image. Verticals also allow you to shoot a narrow field of interest and still create a dramatic panorama.

Next time you go shooting, think vertical! ■



Right: Gondolas were a perfect subject for a vertical panorama.

Don't miss Fred's vertical balloon shot in color on the next page!

Panoramic Profile Photography Of Moving Trains

By Robert Meiborg

In 1995, almost a century after George Lawrence's famous train photograph was made, I began photographing moving trains in panoramic profile. My introduction into the world of panoramic photography was in 1977 at a convention in San Francisco, where I saw and purchased several panoramic photographs of the Bay Area taken by Gene Wright.

In 1978, I purchased the only commercially available panoramic camera, a Hulcherama with a 35mm lens. This was a great camera for interiors and close range exterior photos but it's short focal length lens made it unsuitable for distant scenic photography.

My next camera was a Hulcher TD-70 which uses 70mm film and I'm using it for my

Moving Trains continues on page 17



George R. Lawrence - 1860-1938

As the nineteenth century drew to a close, George R. Lawrence, a Chicago commercial photographer, received an assignment from the Chicago and Alton Railroad to photograph their new "Alton Limited, The Handsomest Train In The World."

In order to complete this assignment, Lawrence designed and built the world's largest camera. It was 10 x 14 feet in size and weighed 1400 pounds. Its format (picture size) was 4 1/2 x 8 feet and used glass for negatives, which were custom made at a cost of \$150 each. In 1900, enlargers and enlarging paper were still a dream; therefore if you wanted a large

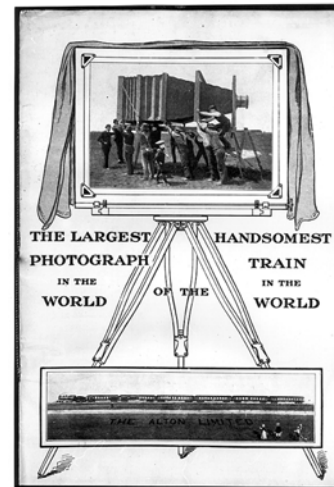
photograph you built a large camera.

The photograph was exhibited at the Paris Exposition of 1900. Obviously using a photograph was more economical than shipping an entire train.

Before the officials of the Paris Exposition would believe the photograph wasn't a fake, they sent a representative to Lawrence's Studio to examine the camera and negative. Convinced it wasn't a fake, they allowed the photograph to be exhibited with the following title:

THE ALTON LIMITED, "THE ONLY WAY" CHICAGO AND ST. LOUIS - THE LARGEST PHOTOGRAPH EVER MADE

Lawrence's most famous photograph was his panoramic kite aerial photograph of the 1906 San Francisco earthquake. ■





Thinking Vertical, Fred Yake created this 160 degree view of balloons in Alburque.

More Panoramas By Steve Bein with his Rotational Specialties Camera



Panamint Valley captured by Steven Bein with his Rotational Specialties camera.



This image of Red Rock Canyon, CA was also taken by Steve with his Rotational Specialties camera.

