INTERNATIONAL ASSOCIATION OF PANORAMIC PHOTOGRAPHERS

Fall 1988

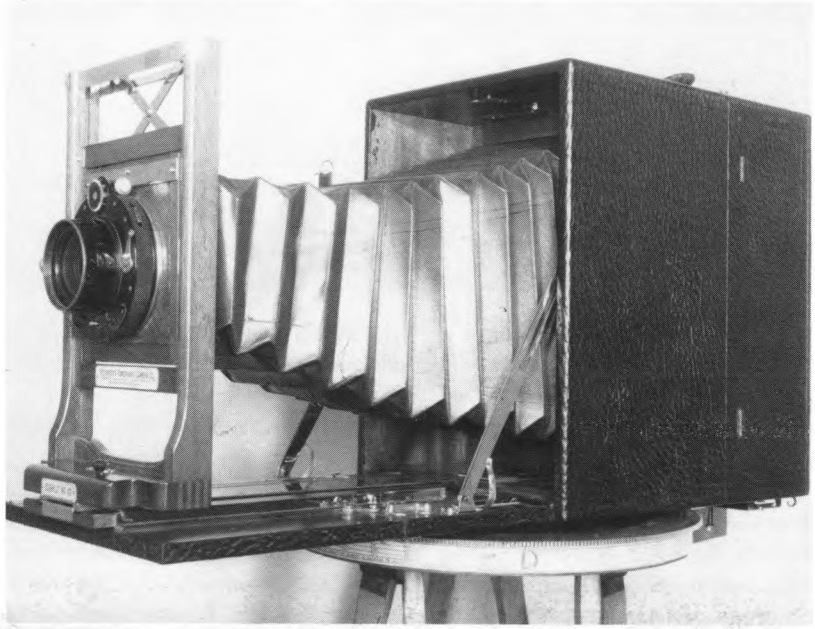
Reston, VA | Orlando, FL | Seattle,WA

Evolution of the Cirkut No.10

An Authoratative History by Bill McBride - p. 5

also inside:

Round Shot Review
Widelux Repairs
New Trajan Staging



Annapolis Convention: A Grand Success

By John Stamets

By all accounts, the 1988 IAPP Convention at Annapolis, Maryland was a grand success. The September convention was attended by 109 IAPP members, their families and product representatives. The three-day event at the Raddison Hotel left just about everybody wide-eyed with new ideas. Special thanks to Jerry Wood, his family and crew for hosting a boat cruise on the Severn River and a wild closing party at his home.

The first day of the convention was devoted to expert presentations to the whole group by camera type: Cirkuts, Hulcher, Widelux etc. These sessions focused largely on technical and maintanence problems, and served to introduce members to each other with the same or similar cameras. "Banding" was identified as the most common and pervasive problem facing panoramic photographers.

Topics for the second day included "Marketing Pans" and presentations by the different product reps. In the evening the IAPP held its grand banquet and honored Richard Fowler for his tireless service in building the association.

On the final day, IAPP members displayed their own cameras and accessories, and for many this was the best part of the convention. Gathered together in one room was enough material to make an entire book on panoramic photography and cameras, an idea that was tossed about more than once at the convention. Even those who thought they knew everything about panoramic photography came away learning something new and exciting.

Since there is no way that all of people, ideas and cameras at the convention can fit into a single newsletter, here are some of the highlights.

The Camera Makers

Although most of those attending were panoramic photographers, it was the camera makers and craftsmen who stole the show. After all, it's the cameras that make the pictures possible.

For the pro market, Seitz of Switzerland announced two new additions to their high-tech 360° Round Shot line: The spy-size Mini-Round Shot 10/10 that takes 9.5 mm film, and the Round Shot 65/5" which snaps a 360° view onto 16" of 5" roll film, through a 65mm lens. The Mini-Round Shot 10/10 was most intriguing. Although the camera is limited by an f16 fixed-aperture 10 mm lens and four equivalent shutter speeds from 1/30 to 1/250 second, the resulting 360° image is only 2.25" long. Peter Seitz Jr., who designed the camera, was present to answer questions.

Other commercial camera representatives at the convention included Karl Heitz with the Alpa Roto and Donal Holway, the man behind the nodally-rotating Globus-Holway system for 5" roll film.

Some of the self-crafted cameras at the convention were truly ingenious.

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Johnny Kurtz of Solecta demontrates the Seitz Round Shot cameras, as Swiss camera designer Peter Seitz Jr (right) and Tekno's Ken Lerner (left) look on. On the wall are prints by Chicago photographer Tom Yanul, who is seated at left.

IAPP Convention

- from p.1

Perhaps the oddest was one built by Andrew Davidhazy, an IAPP founding member and Chairman of the Imaging and Photographic Technology Department of Rochester Institute of Technology (P.O. Box 9887, Rochester, NY 14623). A specialist in the field of moving film imaging, Davidhazy adapted a self-built peripheral camera to take a "conically-shaped" 360° panorama. After being printed on a translucent material like Duratrans, the image can be folded to make a perfect lampshade. Resort hotels take note!

Rick Corrales' hand-driven 360° camera for 35mm film has interchangeable lenses. Even better is his motor-driven version.

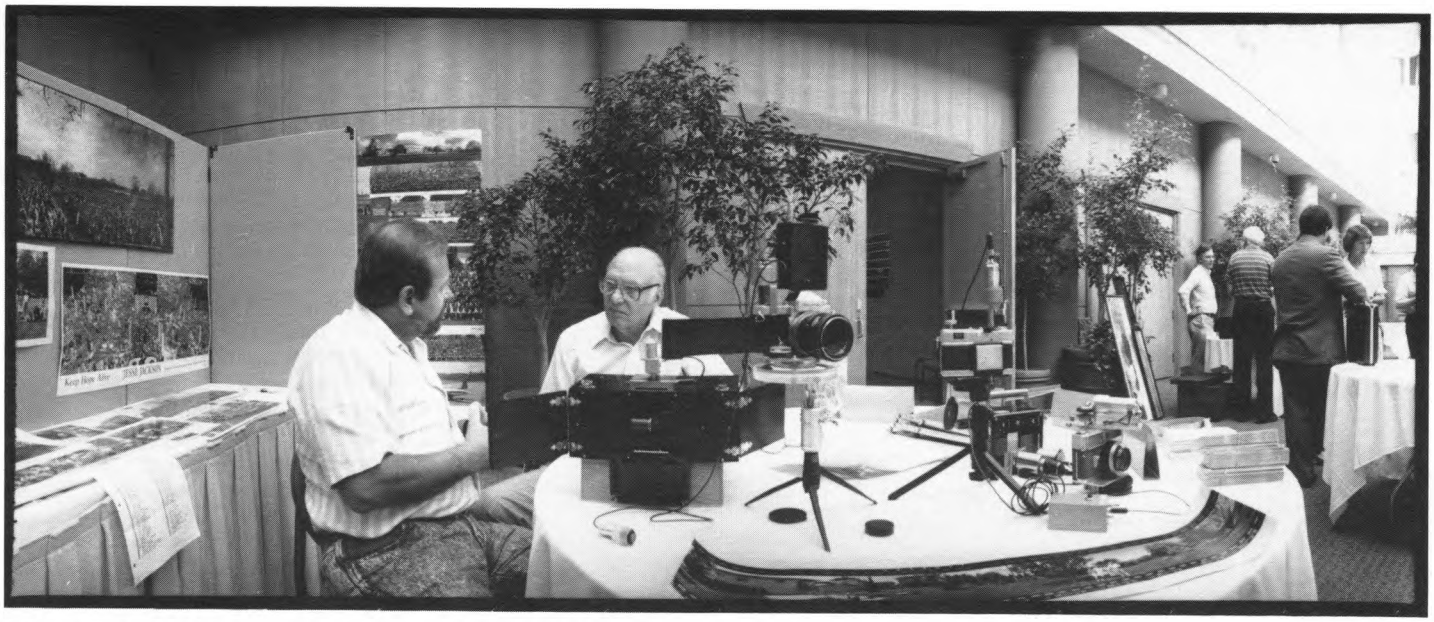
L.A. Times photographer Rick Corrales demonstrated his prototypes of 35 mm, 360°cameras built initially for fast-action newspaper work. The Nikon mount allows interchangeable lenses, a great advantage over single-lens cameras. The motor-driven version has the approximate size and feel of a Globuscope. Most intriguing was the hand-powered version. A hard squeeze of a one-way rack & pinion twirls the camera at an equivalent shutter speed of 1/500 sec. Slower shutter speeds are achieved by squeezing less hard, a touch that comes easily with practise, says Corrales. This is close enough for newspaper work, given the latitude of black & white films and the wide range of lighting in many 360° views. Usually, though, he shoots with his motorized versions.

About a dozen of Corrales' pans have been published in the *L.A. Times*, including a two-page spread of the 1987 earthquake devastation in his home town of Whittier. Corrales and his wife Sue hope to find a manufacturer to mass-produce the motorized and hand-powered versions for less than $1000 retail. Their address is 7335 College Ave. Whittier, CA 90602.

IAPP founding member Philip Foss (1555 Wilson Blvd., Arlington, VA 22209) brought his self-built Rotary Reflex camera that translates a 360° view into a circular donut-shaped photograph on 8x10" sheet film. The camera lets the imagination roll, quite literally, and most of Foss's photos shown were sports and racing cars. Traffic interesections are especially good subject matter with this camera, he says. Foss was also the official Kodak representative at the convention, handing out free film and fielding questions about special-order film sizes for panoramic photographers.

For Cirkut camera users, the IAPP is fortunate to count at least two very able craftsmen among its members: David Paskin and Jim Lipari. Paskin, who is president of IAPP, rebuilds Cirkut cameras from scratch. The five restored Cirkut No.10's that he showed at the convention (in various stages of completion) were already sold. He says he can't keep up with the demand.

Jim Lipari of Omaha, Nebraska is another very able craftsman specializing in Cirkut repairs and modifications. He has also republished original instruction books for Cirkut cameras. Lipari can make a panoramic camera out of anything, and he brought along a bevy of swing-lens cameras that he has recently built. Retired now from the camera stores he had owned,



Jim Lipari (center) of Omaha, Nebraska with his table-full of his panoramic cameras and adaptations. Talking shop with Jim is Mike Lawton (left) of Glastonbury, Connecticut,who won second place in the print exhibition.

Lipari is devoting time now to his real love: panoramic cameras. His expert advice, cameras and accessories were much sought after at the convention.

Other camera-makers at the convention included Robert J. Lang of Port Jefferson, NY and Tom Yanul who contructed his own swing-lens cameras for 20" sheet film. Yanul applies his cameras to the Chicago skyline with great effect and was recently written up in the November 1988 issue of Photo District News.

In the accessory category Ted Saylor (2312 Farwell Dr. Tampa, FL 33603) demonstrated his hydraulic 24-ft extentable pole for getting your camera above the crowd. The pole includes a video camera and miniature video screen so you can assess the view from the ground.

The Picture Takers

Although the camera builders attracted the most attention, most of the 109 people at the convention were panoramic shooters, using everything from the classic 360° Cirkuts with 5" to 16" film to the Widelux. This year the convention featured a very successful print exhibition by the members. Most of the subject matter stuck to the traditional subjects of panoramic photography: landscapes/cityscapes and group photos.

The "best-of-show" award, by popular ballot, went to George Berticevich of San Francisco for an exquisitely hand-colored 360° group portrait of Tibetan monks (see pp 8-9). Ironically, it was also the smallest print in the exhibit, demonstrating that panoramic photography does not have to be big to be beautiful. This image is also available in poster form for $25 from the artist at (G.B.,106A Industrial Center Bldg. Sausalito, CA 94965). For those who saw the original print, be assured that the color in the poster print is even better. The 20" x 26" poster is artfully done with a high ratio of white space to the 3" x 21" image area. (If you want to cut out the image and remount it, that's okay with George.)

Second place went to Mike Lawton, of Glastonbury, Connecticut for an aerial view of New York Harbor, and third place to Doug Brown of Calgary, Alberta for a 400-degree Cirkut view taken *inside* a hot air balloon while it's being inflated. This is definitely not your typical hot-air balloon shot. The image is mostly bright fabric ablaze in back-lit colors and patterns, except at both ends there is the same distant view of a normal green field outside the hole. A real "Alice in Wonderland!"

Other notable images on exhibit included Tom Schwab's giant mural of Texan Trail Riders which hung in the hotel lobby at the convention. The original print (from 10" roll film) measured 80" x 60 ft, but Tom had to cut it down to 40" x 48 ft to fit the available space at the hotel.

IAPP members with posters or calendars for sale included Gus Foster (PO Box 1778, Taos, NM 87571) who shoots serene Southwest landscapes with the Globus-Holway 5" camera system.

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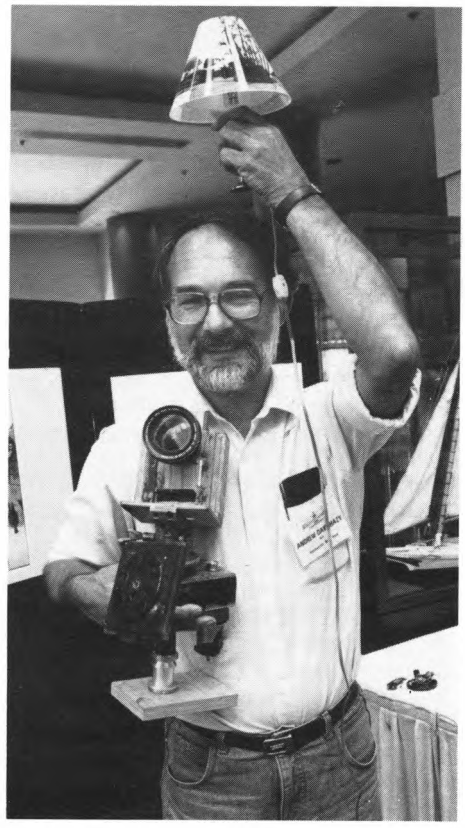
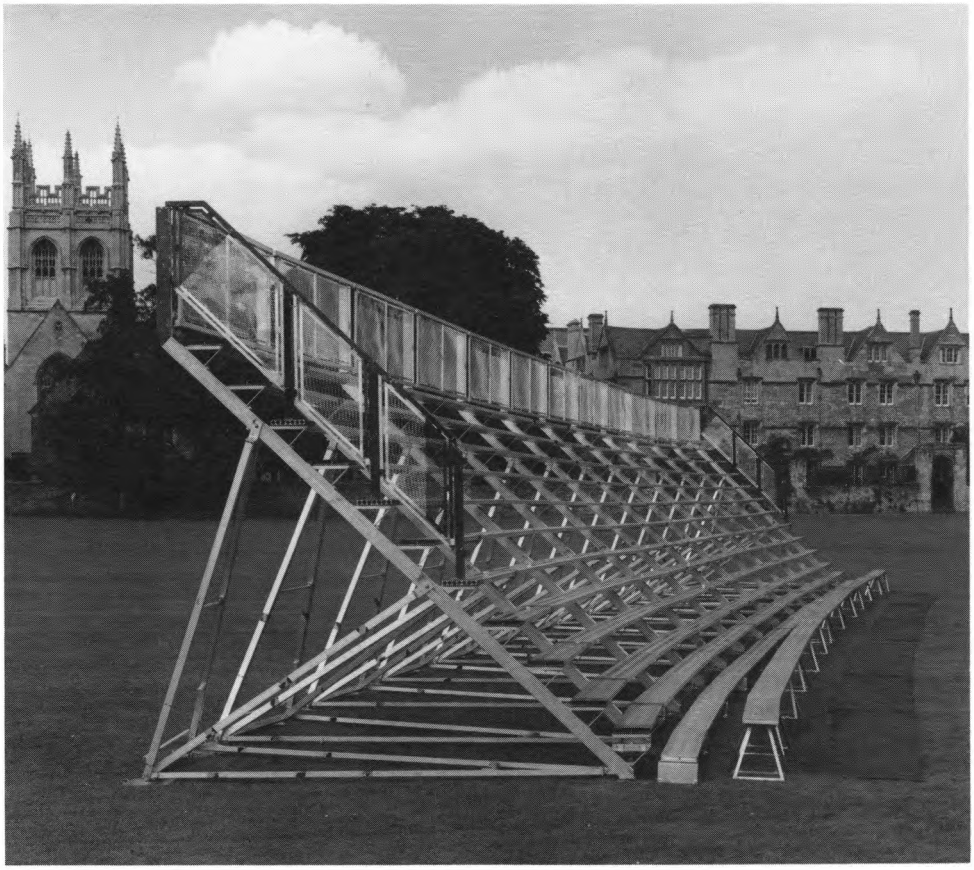


Andrew Davidhazy and his bright idea.



A new innovation for large-group photographers

Trajan Staging from England

By John Stamets

From the time of the first panoramic photographs, large-group photographs have been an obvious and often lucrative application of Cirkut-type cameras. It's not often in the spotlight, but the tradition of large group photography continues strongly in the 1980s, as evidenced at the recent IAPP Convention.

Although few in number, the 11 large-group photographers at the convention were among the 20 or so who could claim all or most of their income from panoramic cameras. They also came the greatest distances: Carlos Chavez and sons from Mexico City, Betty Bullard from Sydney, Australia, and Ben Harris, Bernard Crapper and John Colwill from England. Also attending the convention from nearby Washington D.C., were the leading group and ceremony photographers in the nation's capitol: Ed Segal of Capitol Photo and James Ivey of Central Photo. This year the official IAPP group photograph was taken with a Cirkut #10 by Ed Goldbeck, grandson of late, legendary Texan panoramist, E.O. Goldbeck.

Technologically, "not much changes" in group photography, says Ben Harris whose school's division, Gillman & Soame of Oxford, has been photographing English schools and universities for 148 years. Even though their business is well-established, Harris says it's nevertheless important to keep improving the product. "The customer may not be looking for innovations, but he or she will respond when we provide them." And that attitude has translated to increased business and profits at Gillman & Soame.

But with group and portrait photo sales reaching $2 million last year, Ben Harris did not cross the Atlantic to find more school children to photograph. Instead he came to sell the company's latest innovation: Trajan Staging, a modular aluminum bleacher system that can be readily assembled for any group from 50 to 1500.

The Trajan system can be assembled for both field and Cirkut-type cameras. As an example, an 8-section unit, 5 rows high, is suitable for a group of 250 people. A 21-section assembly, 12 rows high, will safely hold 1500.

The major innovation -- besides the fail-safe design and easy portability -- is that the row spacing and rises are optimized to create "a wall-of-people" effect. This maximizes the size of each person's face relative to the print size, and can be a major selling point with large groups.

For Cirkut photographers, the print length can be reduced by at least 25 percent, while the face size remains the same.

In 1988, the first year that Gillman & Soame used the Trajan system, Harris says their net profits soared to the equivalent of $221,000, compared to $93,000 in 1987.

In the field there have been some added benefits to the new bleachers. "We've noticed that Trajan has a psychological effect on groups assembling to be photographed," Harris says. "They sense that this is state-of-the-art equipment and they show their appreciation to the photographer in small ways: by better co-operation, greater attention to instructions and often a more cheerful attitude. Stimulated by the novelty of the situation, they are happy to settle down and help make the picture."

At the end of a successful summer with over 80 large groups on the new aluminum staging, Trajan staging was used to photograph the Anglican Bishops who had travelled from around the world to attend the Lambeth Conference at Canterbury, England - an event that occurs once every 10 years. The novelty of the new staging itself attracted media attention.

The system is easily portable with a van, small truck or trailer. Furthermore, the aluminum bleachers are designed so that it is impossible to assemble them incorrectly. Arguably, Trajan Staging -- officially called Trajan Portable Assembly Staging -- is a notable innovation in group photography where changes, if any, are measured in decades.

Ben Harris, through his parent company B.J. Harris (Oxford) Limited, is now planning to supply the Trajan system to American photographers, probably through regional franchising arrangements. If you are interested to know more about Trajan staging and the Gillman & Soame approach on marketing group photographs to schools, etc., please contact Ben Harris at the parent company:

Ben Harris (Oxford) Limited,
The Laboratories,
Mill Street,
Osney,
Oxford OX2 ODJ.
England
Tel. (0865) 245482
Fax. (0865) 725034

EVOLUTION OF THE No.10 CIRKUT CAMERA

By Bill McBride

The most widely used large format panoramic camera in America has been the No. 10 Cirkut Camera for 10" film. Invented in Wyoming and manufactured in Rochester, NY from 1904 to 1940, this "field-camera-on-a-turntable" remains the choice of many leading panoramic professionals in the 1980s. Today's working Cirkuts often employ electric motors and other modern adaptations.

Just how many No.10 Cirkuts were manufactured is unknown due to incomplete company records. The author estimates that 520 fan-type No.10 Cirkuts and 980 governor-type No.10 Cirkuts were produced over the years.

The following is an account of the author's research into the early manufacturing history of the No. 10 Cirkut, including a detailing of at least six different models. To help clarify the chronological order, the author has assigned his own model numbers (I-VI), as listed in Table 1. Basically, there were two types of No. 10 Cirkut Cameras produced: fan speed control type and the governor speed control type. Future articles will cover the Nos. 5, 6, and 16 Cirkut Cameras (which take the corresponding film sizes in inches) and the Nos. 6 and 8 Cirkut Outfit Cameras.

The Cirkut Camera probably obtained its name from photographing military units. In the early days a photographer made a circuit of the area to take photographs of tents and troop maneuvers. The circuit here refers to travelling around a periphery of tents. Since the Cirkut panoramic camera did a better job of covering the periphery than the conventional view camera, it was given the name "Cirkut" by its inventors Johnston, Reavill and Brehm. The camera could not be named "Circuit," which was already a registered name, so they used "Cirkut" for their panoramic camera.

This article is based on the best information and materials available to the author. Any additional information and/or comments on this article would be appreciated. -- Bill McBride, PO Box 6237, Santa Barbara, CA 93160. 805-684-7268.

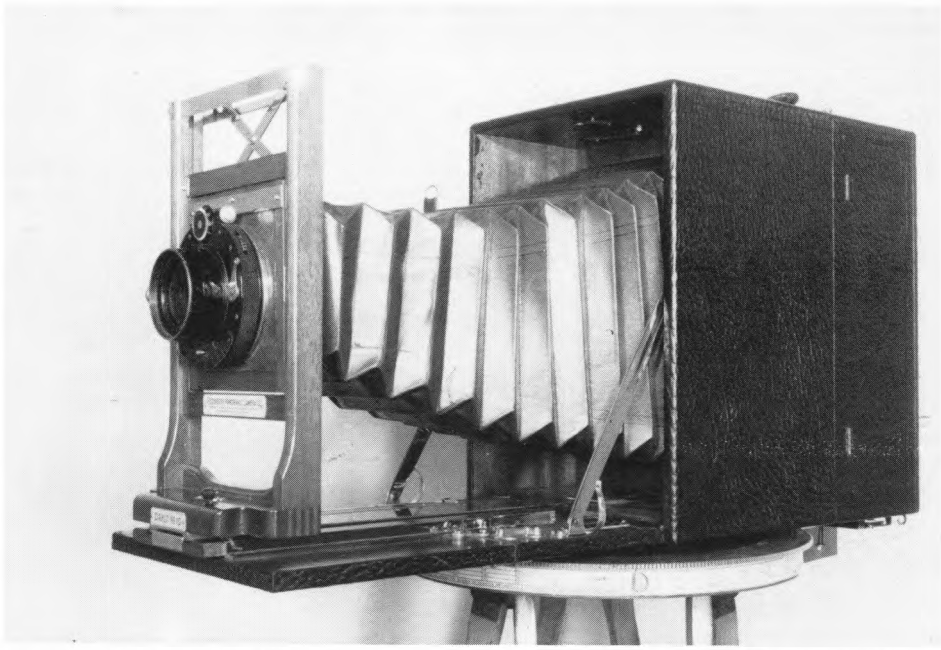


***Figure 1.** The first No. 10 Cirkut manufactured by Rochester Panoramic Camera Co. Note the scissors mechanism to raise or lower the lens board which identifies it as an earlier fan type No. 10 Cirkut (Model I or II). The camera shown is set at the 22" focus.*

The early No. 10 Cirkut Cameras used air-resistance fans to control camera speed of rotation, while the later Cirkuts employed a variable speed internal governor for speed control. The Cirkut Camera is built with an internal clockwork motor that pulls the film past the vertical exposure slot counter-clockwise at a pre-selected speed. At the same time, the motor rotates the camera in the opposite direction (clockwise) on the geared tripod at the same relative speed that the roll film is moving past the exposure slot. Thus, that portion of the film being exposed is, in effect, stationary. The standard camera is capable of taking pictures of different angles of view, including a 360° single exposure 12.5 ft long using a 24" focal length lens. The camera film drum can hold up to 20 ft of roll film. The overall length of the negative is determined by the focal length of the lens and the desired horizontal angle of view. A distance scale on the tripod head gives the inches of film required for theangle of view selected. By using the longest focal length of the lens, the longest negative is obtained and, at the same time, the largest image of the subject. The camera was utilized to photograph hotels to hang in other hotels, interesting features of railroad lines, panoramic views of real estate development projects, views of manufacturing plants, and most of all, groups of people.

The Cirkut-type panoramic camera design was first patented November 29, 1904 (No. 776,403) by William J. Johnston of Rock Springs, Wyoming. On January 17, 1905, Johnston also obtained a camera-revolving apparatus patent (No. 780,351) to improve the first design by simplifying the gear train to make the camera work smoother.

David A. Reavill of Rock Springs, Wyoming and Rochester, New York was granted two patents on January 17, 1905 (No. 780,381 and 780,382) for a panoramic design which he assigned to the Rochester Panoramic Camera Company of Rochester, New York, a Corporation of Wyoming. During this time, William J. Johnston also assigned his camera patent designs to the Rochester Panoramic Camera Company. The Rochester Panoramic Camera Company was incorporated on May 16, 1904 in Wyoming with the company location on South Front Street in Rock Springs. For the company's first year, the following persons were the corporate officers: A. Kendall, President; Burt Smith, Secretary; and Lloyd P. Thomas, Trustee. These Rock Springs investors appear to be only financial backers for Johnston and Reavill as their names were not shown on the Panoramic Camera patents. The Cirkut-type panoramic designs as patented by Johnston and Reavill were not commercially produced.

The first commercially manufactured No. 10 Cirkut panoramic camera (Model I in Table 1) by the Rochester Panoramic Camera Company was a panoramic camera (Figure 1) designed by Frederick Brehm of Rochester, New York, patented on January 17, 1905 (No. 780,406). The camera was constructed with prime mahogany wood with the wood exterior covered with high quality leather, and the interior wood varnished beautifully natural. The exposed metal hardware parts were brightly nickel plated, and the camera had high quality red leather bellows 27" long.

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Table 1. No.10 CIRKUT CAMERA CHRONOLOGICAL ORDER

McBride's Model No.	Manufacturer	Years of Production	Speed Control	Remarks
I	Rochester Panoramic Camera Co.	1904-1905	Fan	The first No.10 Cirkut made and the one that had the most features for the photographer
II	Century Camera Compay	1905-1907	Fan	Similar to Model I minus several features. Two film pressure plates added.
III	Century Camera Division of Eastman Kodak Company	1907-	Fan	New camera lens-frame and new tripod head design.
IV	"	-	Fan	Same as Model III but with improved motor start lever mechanism
V	"	-1915	Governor	The first governor-type No.10 Cirkut. A completely new camera.
V-A	Folmer and Schwing Division of Eastman Kodak Company	1915-1917	Governor	Same as Model V except for the nameplate.
V-B	Folmer and Schwing Department of Eastman Kodak Company	1917-1926	Governor	Same as Model V except for the nameplate.
V-C	Folmer Graflex Corporation	1926-1932	Governor	Same as Model V except for the nameplate.
VI	"	1932-1940	Governor	Same as Model V except for the nameplate, and the new lens of 10", 15.5" and 20" focal lengths.

History of Cirkut No.10 *-from p.5*

The lens board for this first Cirkut No.10 was 3.75" square. The lens could be tilted up or down, and/or raised up or down with an adjustable screw on top of the camera lens-frame. This camera had three rollers on the bottom of the camera (Figure 2) for camera rotation on the brass ring gear on the wood tripod top. The Rochester camera (Model I) was the only No. 10 Cirkut built that had an adjustable exposure slot of 1/8", 1/4" or 1/2" (Figure 3). This model used air resistance fans of different sizes to control the speed of camera rotation on the tripod. The five fans that came with the camera gave exposure times (equivalent shutter speeds) of 1/3, 1/6, 1/10, 1/25 and 1/30 of a second using the 1/4" exposure slot. If the 1/8" exposure slot was used, the exposure time is half of the time of the particular fan selected. If the 1/2" exposure slot was used, the exposure time was double the time of the particular fan selected.

For focusing the No. 10 Cirkut Camera, the film box is removed and the ground glass focusing back is pulled out and locked in place to focus the camera (Figure 4). This is the way all No. 10 Cirkuts are focused.

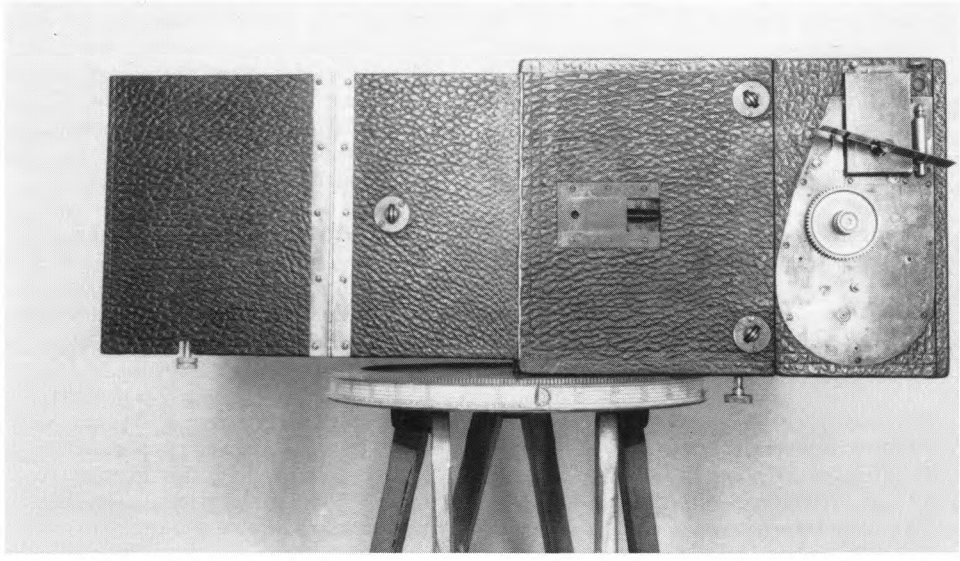

Figure 2. Bottom view the Model I. Note the three rollers on the bottom and the tripod gear adjustment in the center. Hinge on left is for tilting the front bed.

All No. 10 Cirkuts had a film movement scale in inches and degrees mounted on the tripod head which gave the distance the film moved in inches on an exposure. On this model and other fan models, the exposure slot opens when the camera film box is locked on the camera. The camera clockwork mechanism on the fan-type cameras is started and stopped with a hand operated air pressure bulb after the motor spring is wound up. The film spool holder on this camera is adjustable from 2.25" to 10" roll film. Because the later models had larger upper film spool sprockets, the Model I camera is the only No. 10 Cirkut that can use today's 120 roll film without the use of an adapter. The lens originally furnished with this Cirkut was an 11" or 22" focal length doublet convertible lens manufactured by the Gundlach Optical Company of Rochester, NY. Later on the Turner-Reich 10 7/8"-18-24" triple convertible lens manufactured by the Gundlach-Manhattan Optical Company of Rochester, NY was made available for the No.10 Cirkut.

This lens became the standard for the Model I and Model II cameras. This triple convertible lens was patented by Henry H. Turner and John C. Reich on May 14, 1885 (No. 539,370). For each of the three focal lengths there were

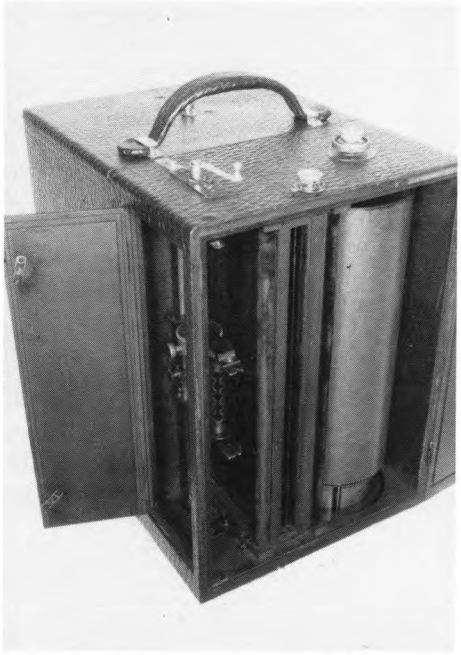

Figure 3. Back side view of opened film box on Model I. Side door opens to assist photographer when inserting film, a feature provided on fan-type No. 10 Cirkuts. Note adjustable slot knob on top of film box and120 film spool in place.

Cirkut No.10

- from p.6

three pinion gears provided, where one gear was for the subject 100 ft to infinity in distance away, another gear for 50 ft away, and a third gear for 25 ft.

Some No. 10 Cirkut Cameras were modified so that the folding front on the camera could be dropped to keep the front portion of the folding front out of the picture when using a short focal length lens (Figure 5).

David A. Reavill, Vice President of the Rochester Panoramic Company, filed on August 28, 1905 an application for the name "Cirkut" to be used as the trademark for the company's panoramic cameras. On April 24, 1906 the Cirkut name was registered at the United States Patent Office (No. 51,824). This No. 10 Cirkut (Model I) was manufactured from 1904 to 1905. It came with two carrying cases, one for the camera and one for the tripod and gears.

The Century Camera Company

On July 15, 1905 the Rochester Camera Company entered into an agreement with the Century Camera Company, also of Rochester, for the sale to the latter of "Good will, Trademarks, and Trade-names and Personal Property." The Century Camera Company, whose stock had been purchased by Eastman Kodak in 1903, then continued to manufacture the No. 10 Cirkut (Model II), at first on a royalty basis and later by the right of purchase of the patents. This camera was produced the same as the Rochester Panoramic Company Cirkut (Model I) except that the exposing slot was fixed at 1/4" with no adjustable slot provision. At least one Model II camera has been observed to have a nickel-plated cover plate over the hole for the exposure slot adjustment knob, so Century Camera Company may have planned to have an adjustable exposure slot, but the decision was made to make the slot fixed at 1/4". On the Century No. 10 Cirkut (Model II), a 4 3/16" film pressure plate for the film spool and a full length film pressure plate over the exposure slot were added. The film winding drum was lengthened to 10" as compared with 9 3/8" on the Model I to provide a more solid base for the film to wind on. The Model II, and all later fan-type No. 10 Cirkut Cameras, could take 6" to 10" roll film. The Century Camera Company manufactured the No. 10 Cirkut (Model II) from 1905 to 1907.

In 1905 the Eastman Kodak Company purchased the Folmer and Schwing Manufacturing Company and shipped its machinery, fixtures, merchandise, etc. to Rochester, NY where it was installed in the Century Camera Company plant. Even though Eastman Kodak owned Folmer and Schwing Manufacturing, the company was operated as a separate company producing Folmer and Schwing products. The Century Camera Company and the Folmer and Schwing Manufacturing Company were operated as two separate companies in the same building producing their own camera products. On January 2, 1906 Folmer and Schwing Manufacturing Company became the Folmer and Schwing Company. The Century Camera Company maintained the business records for both companies, but kept them separate.

Figure 5. A modified Model I showing the front bed drop provision where a 6" auxiliary bed is installed for the camera lens frame to slide on for focusing.

On May 22, 1907 the Century Camera Company was merged with the Eastman Kodak Company, and then dissolved on July 1, 1907 becoming the Century Camera Division of the Eastman Kodak Company. Also on July 1, 1907, the Folmer and Schwing Company was dissolved and became the Folmer and Schwing Division of the Eastman Kodak Company. These two Eastman Kodak Divisions were managed together by William F. Folmer.

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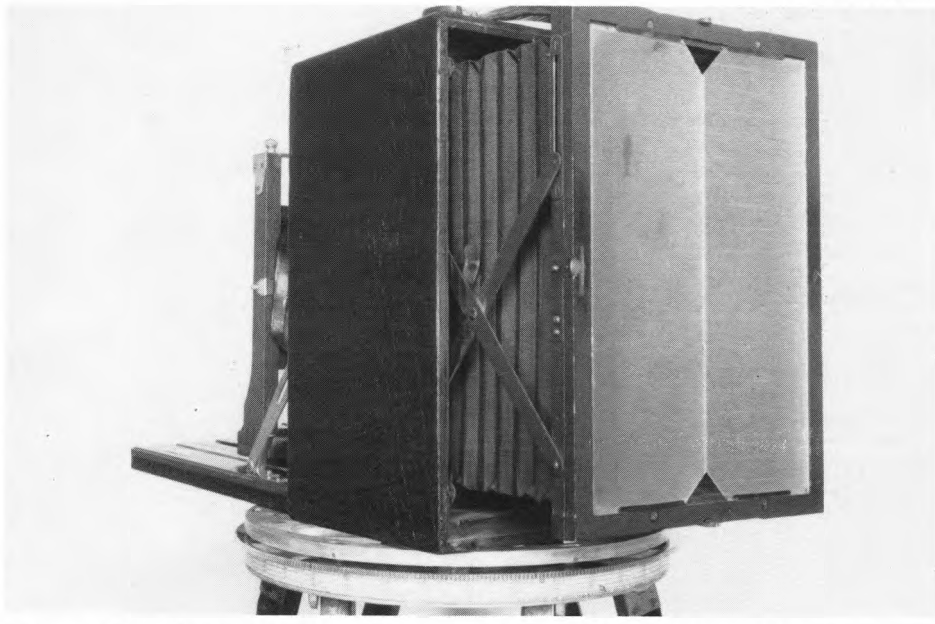


Figure 4. Ground glass in position for focusing, shown folded back in and hinged over prior to the film box being placed on camera body.

April, 1985 Sera Monaster

The "best of show" award in the print exhibition went to George Berticevich for this hand-colored 360° portrait of Tibetan monks. This ima

This view of the IAPP Convention at the Annapolis Raddison Hotel was taken with a Round Shot 65/70 by Rainer Lampinen (PO Box 35,

The Official 4th IAPP Convention Photograph was taken by Ed Goldbeck with a Cirkut No.10. (4407 Center Gate, San Antonio, TX 78217

ar Lhasa, Tibet

in color, is available on a poster from the artist for $25 (106A. Industrial Center Bldg.. Sausalito, CA 94965).

)0521, Helsinki, Finland).

iginal in color. Ed is seated second from right beside his wife Sally. His grandfather is the late and legendary Eugene O. Goldbeck.

Round Shot Report from Finland

By Rainer K. Lampinen

When I turned full-time to panoramic photography some years ago, I noticed quite soon that I would need three different types of panoramic cameras. The most important and potentially profitable of these seems to be the rotation-type full-circle panoramic camera.

Like other IAPP members, I have also designed rotation-type cameras and tripods. For me, the main criteria for such a camera are: 1) vibration-free operation, 2) the frame length the same at the end of the film roll as at the beginning, 3) zero-banding, 4) a shiftable lens with a correcting viewfinder, 5) focusing ability, and 6) a rectilinear "distortion free" lens having the best color balance and color contrast for transparency film. In addition, 7) it's nice to have the capability for long exposure times for interior or night-time pans; and finally, 8) film size and 9) image aspect ratio (length vs. height) are important to consider for a rotation-type camera. The film must be as big as possible, but it must be small enough to use on a scanner drum and enlarger.

Earlier such a camera was not available to me, unless I wanted to try to build it myself. Luckily, I won't have to try, because the new Swiss-made Round Shot 65/70 is that perfect rotation camera for me. Now the Cirkut folks will probably scratch my eyes out, but if they want to be up-to-date and get more business, they would also turn to a camera which fulfills the above requirements.

For understanding circle photography techniques, it is good to make the cameras yourself. But if you take your work and your customer seriously, you should look as professional as possible. To get the highest price for your photos, there is no room for guesswork.

At the recent IAPP Convention in Annapolis, all four of the Seitz Round Shot cameras were on display: The Roundshots 10/10 (lens/film size in mm), 35/35, 65/70 and 65/5". I do not dispute which may be best the camera. In my case the most suitable is the Round Shot 65/70.

At first sight it seems well-finished and when you open it, it still seems well-finished. You can feel its high quality, made in the tradition of Swiss watchmakers. I shall follow the Finnish tradition: to keep one's promise, and when I have promised to my customers to make the best available pans, I'll do it with a Round Shot.

The author's address is: P.O. Box 35, SF-00521, Helsinki, Finland

You cannot use paper-backed 120 films in the Round Shot, but you can use 220 size or 70 mm. The cassette-loaded 70mm film is recommended. With a 65mm Grandagon lens, the image size for a 360° view is 6.0 x 40.8 cm. Thus you can get 10 full-circle shots with a 4.5 m cassette of film.

Unlike some other quite similar cameras, the Round Shot has a film counter. It counts how many 90° pieces you have exposed on the film. An electronic control connects to the camera with a cable, and with it you select the view size from 90° to 810° (in 90° segments).

For interior work it is most essential to have focusing. The Round Shot has continuous focusing from 3m to infinity, with the dial marked at 3m, 5m, 10m and infinity. But every panoramic photographer knows that to achieve the most critical sharpness, the camera must turn around its optical axis; thus it is not possible to focus by moving the lens. The alternative is to move the exposure slit position toward the film plane so that the required focus has been achieved. This ingenious feature on the Round Shot is most welcome.

Another important feature is the camera's slow speeds. Anyone who has tried to build slow speeds into a rotation camera knows that it is very difficult to do when using a DC motor. Some have tried using a cheap Volkswagen windshield wiper motor, but it will never to be exact. The only exact and reliable way seems to be by using very fine gears like the Round Shot has done. The slowest effective exposure time on the Round Shot is 4 seconds, which results in a 16-minute rotation time for a 360° view. This is a firm, reliable and exact turn. It is fantastic! Recently I took some night shots at full moon, and the moon had the same speed and rotation direction as the Round Shot. The result was exact lighting with a round moon, not oval or enlongated as with a normal camera.

I was confronted with another difficult lighting situation recently when I photographed the interior of a big printing house. The machines were running and the floor was vibrating. According to my experience, the only vibration-free tripod is the Manfrotto #028 (in USA the Bogen #3040) and the best head is the Manfrotto Ball Camera Leveler #138. The main light came from the windows, so I used daylight Ektachrome 64. For side-lighting I used the Unomat Auto Video light (2000 W) which reduces the intensity when it turns toward nearer objects (furniture, machines, pillars, etc.). A daylight-conversion filter was used in front of the video light. I set the Round Shot exposure time to 4 seconds, the focus to 3 m, and the aperture to f32, then triggered the camera to turn. The result was perfect. Everything was sharp - moving machines could be seen, workers walking about disappeared from the film, and with a 50x magnifying glass I could read a calendar hanging on the opposite wall.

More Tech Specs

The exposure and revolution times on the Round Shot are: 4 sec (16 min), 2 sec (8 min), 1 sec (4 min), 1/2 sec (2 min), 1/4 sec (1 min), 1/15 sec (15 sec), 1/30 sec (8 sec), 1/60 sec (4 sec), 1/25 sec (2 sec), and 1/250 sec (1 sec).

The battery and charger are built together. The battery is really powerful. During my two-week trip to the USA and Canada, I never had to recharge it while shooting several cassettes of film. My only problem came from the 4 AAA batteries that run the control unit, but those batteries were not made Solecta/Seitz Phototechnik. If not used, the control-unit power will switch off automatically after 20 seconds.

The lens is a 65mm Rodenstock Grandagon MC f4.5 - f45, stepless. The lens shifts upward 28mm manually or by motor. If you need to shift down, you must turn the camera upside down and then shift. This might be done from a helicopter or airplane.

The viewfinder can be turned without turning the camera so you can assess the view in all directions before taking the picture. The viewfinder is also synchronized with the lens shift and can be easily removed from the camera altogether.

The Round Shot was designed and manufactured in Switzerland by Seitz. In my opinion it is the most advanced and probably finest panoramic camera ever made. It is easy and reliable to use. If you really want a money-maker, not a trouble-maker, the Round Shot will be the right investment for you.

History of the Cirkut No.10

-cont. from p. 7

The Century Camera Division of Eastman Kodak Company made design changes to improve the No. 10 Cirkut and subsequently produced three different No. 10 Cirkut Cameras. There were two additional patents by Harvey W. Locke of Rochester, NY used for the Century Camera Division Cirkut No. 10 Cameras besides the patents of November 29, 1904 and January 17, 1905 previously mentioned. One camera patent was No. 708,721 of September 9, 1902 and the other was No. 720,040 of February 10, 1903 which was assigned to the Century Camera Company. The Locke patents were for camera body design rather than the Cirkut mechanism as covered by the other patents.

The first No. 10 Cirkut produced by the Century Camera Division was the Model III. The camera's wood lens frame was revised (Figure 6) as the lens board tilt movement on the Models I and II was replaced with a right or left front adjustment. The up and down vertical movements of the lens was retained, and the lens board size was changed to 3.5" square. The brass base plate for the mechanical motor was made rectangular (4.25" x 7.25"), as compared to the oval-shaped plate designed by the Rochester Panoramic Company.

The Model III No.10 Cirkut had the usual bright red bellows, natural varnished red mahogany interior wood, nickel-plated metal hardware, and high-quality leather

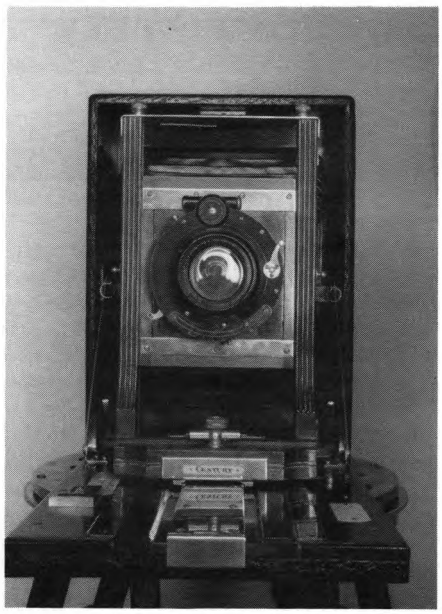


Figure 6. *Shown is the newly designed lens-frame by Harvey W. Locke used on Model III and Model IV.*

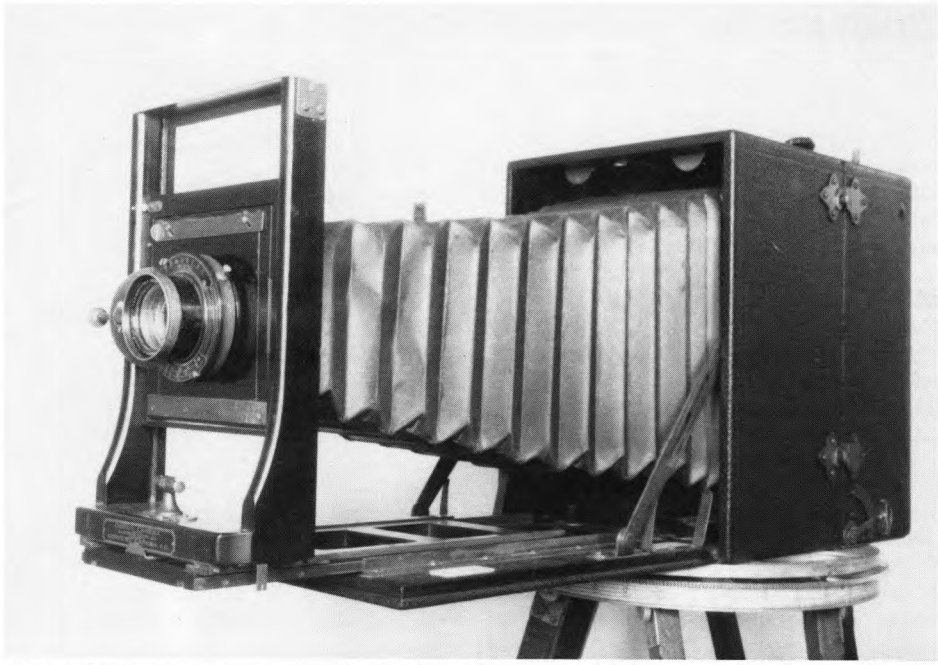


Figure 7. *The first governor type No.10 Cirkut Camera,Model V, made by the Century Camera Division of Eastman Kodak Company. It's shown here at the 24" focus.*

covering on the camera exterior. The tripod head arrange-ment was redesigned so that the rotation movement of the camera on the tripod was one assembly. The rollers on the bottom of the previous Rochester (Model I) and Century (Model II) cameras were eliminated. The new tripod head was made of cast aluminum frame with an aluminum disk plate on top with six built-in rollers. The camera was mounted on top of this aluminum disk plate when taking a picture. This tripod head design became the standard one for all future No. 10 Cirkut Cameras.

The Model III and Model IV No. 10 Cirkuts came with three speed control fans (1/3, 1/6 and 1/10 second) instead of the five fans included on the previous models. The focal lengths of the triple convertible Turner-Reich lens were changed to 10.5"-18"-24", which became the standard lens for all subsequent No. 10 Cirkuts produced to 1932.

The Century Camera Division manufactured another No. 10 Cirkut Camera (Model IV) like the one just described, except that it had a redesigned camera start-stop mechanism. This mechanism was simplified, but still used an air bulb to operate the camera with the desired speed control fan.

The Century Camera Division manufactured the first governor speed control type No. 10 Cirkut Camera (Model V) which was a completely new camera (Figure 7). This model is believed to be developed by William F. Folmer about 1909, since the No. 5 Cirkut Camera with a similar governor speed control was patented by him in 1918. The Model V No. 10 Cirkut was made all black with the wood painted black, black leather, black bellows, and black finished metal hardware. The earlier camera speed control fans were eliminated, and a variable speed internal governor was added to the camera clockwork. The new camera speeds made available on the Model V were: 1/12, 1/10, 1/9, 1/8, 1/4 and 1/2 of a second. A lever on the side of the camera film box is rotated to start and stop, and at the same time, the lever opened and closed the exposure slot. The exposing slot was fixed at 1/4" and the film spool bracket adjustment was for 6", 8" and 10" wide roll film. The camera lens board, now 4" square, could be raised up or down and/or tilted up or down. To accomodate the governor assembly, the brass motor plate was enlarged to 4.25" by 9".

The tripod head design and the triple convertible lens remained the same as the previously described No. 10 Cirkut. The tripod for the Model V came with three sectioned Eastman Professional Tripod legs. Thus, the tripod head for the Model V could be used with the 12 ft Century tripod legs to obtain a higher camera elevation if needed by the photographer. This model could also be used on the No. 8 Cirkut Outfit Camera tripod, which had the four sectioned Crown No. 4 tripod legs and is a little bit taller than the No. 10 Cirkut tripod.

The Century Camera Division of the Eastman Kodak Company manufactured the No. 10 Cirkut Cameras until 1915 when the governor type No. 10 Cirkut was priced at $290.

-cont. on p.12

Cirkut No. 10 - cont. from p.11

From 1915 to 1917, the Folmer and Schwing Division of Eastman Kodak built the same governor-type No. 10 Cirkut Camera (Model V-A), except for a new name plate and a slightly higher price of $300. In 1917 the Folmer and Schwing Division became the Folmer and Schwing Department of Eastman Kodak, and this change was reflected in the name plate on the No. 10 Cirkut (Model V-B). This model was produced without any further changes until 1926. The 1920 Graflex catalog listed the No. 10 Cirkut Camera (Model V-B) for $385.85 and a 6 ft. roll of 10" film for $2.90.

The Century Camera Division, Folmer and Schwing Division and Folmer and Schwing Department all published the booklet "The Cirkut Method" which described the different model Cirkut cameras available. Typical Cirkut photographs were shown in the booklet. Also available from the Folmer and Schwing Department was a booklet titled "Profitable Pictures with a Cirkut."

The Folmer Graflex Corporation

In 1926 Eastman Kodak sold Century Camera, Folmer and Schwing, and the Rochester Optical Divisions, and together they became the Folmer Graflex Corporation of Rochester, NY. Folmer Graflex manufactured the same black governor type No. 10 Cirkut Camera (Model V-C) as previously produced, changing only the name plate. In 1927 the Graflex catalog listed the No. 10 Cirkut camera for $405.

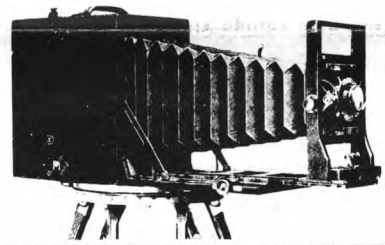
***Figure 8.** Front view of Folmer Graflex No.10 Cirkut with triple convertible Turner-Reich lens. This version was made briefly when the camera was built by the Seebold Invisible Camera Corporation.*

A Folmer Graflex No. 10 Cirkut (Figure 8) has been observed to have the Turner-Reich Anastigmat f6.8 Series II triple convertible lens made by the Seebold Invisible Camera Corporation of Rochester, NY, instead of being made by the usual Gundlach-Manhattan Optical Company, also of Rochester. Imagine the Seebold Invisible Camera Company manufacturing a lens for the not-so-invisible No. 10 Cirkut Camera!

In 1926 the Gundlach-Manhattan Optical Company changed its name to Gundlach Manufacturing Company. In 1928 it was taken over by John E. Seebold, who changed the name to Seebold Invisible Camera Company. Mr. Seebold left the company the following year. By 1931 the company name was changed back to Gundlach Manufacturing Company.

In 1932 the Folmer Graflex No.10 Cirkut Camera (Model VI) was provided with a new f6.8 Anastigmat lens with 10"-15.5"-20" focal lengths. This lens became the standard for all subsequent No. 10 Cirkuts. The configuration of the Model VI was the same as the Model V-C, except for the new lens. The 1936 Folmer Graflex No. 10 Cirkut Camera was listed for $429.50 and came with the usual two carrying cases, one for the camera and the other for the tripod and gears.

The last year that the No. 10 Cirkut was manufactured in any quantity was 1931 when 60 cameras were made. For the rest of the 1930s, Folmer Graflex built 0 to 5 cameras per year. Folmer Graflex manufactured the last No. 10 Cirkut in 1940. In 1945 Folmer Graflex became Graflex, Inc., which handled the sales of the remaining No. 10 Cirkuts in the company's inventory until 1949. •



On the Golf Cirkut with John Yang

By Robert J. Lang

IAPP member John Yang has been taking black-and-white panoramic photographs with a Cirkut No.10 since 1981. His third one-man show, "The Golf Course as Landscape Art," will be held at April 15 to May 18, 1989 at the Marcuse Pfeifer Gallery, 568 Broadway, New York, NY 10012. (212) 226-2251.

Over a period of four years, Yang has photographed over 60 golf courses, most of them located in the New York metropolitan area. He has yet to play the game himself. Golf courses interest him as works of art, and in his pictures, it is his intent to document and celebrate the work of the landscape artists who created them.

The show itself will consist of framed black-and-white prints, 10" x 78". Many of the photographs encompass a 360° view.

Yang uses a Cirkut No.10 camera, and in particular, the version made by the Central Camera Camera Company in Rochester, NY between 1905-1907 (McBride Model II). The camera's gear train is controlled by a fan governor. Its shutter slot is adjustable from 3/16" to 1/2". He uses lenses from 8.25" to 25" in focal lengths. In order to use the 8.25" lens without vignetting the image, Yang devised a hinged drop-front bed (built by IAPP member Jim Lipari) that does not sacrifice rigidity or convenience when normal and long lenses are used.

When Kodak discontinued Royal-X Pan film, ISO 1250, Yang switched to Tri-X Pan, ISO 400 (Catalog No. 137 4859, Spec. No. TX 820, 10" x 100' roll; minimum order of 8 rolls was split with IAPP member Harold Lewis). Yang needs the fast films when using long lenses in order to attain sufficient depth of field beyond that obtainable by the use of forward tilts. When using extreme forward tilts, Yang takes into account any change in position of the rear nodal point of the lens. This usually requires refocusing, but also requires an additional adjustment in locating the index matching gears to lens extensions.

Yang processes films and prints by hand (rolling and unrolling) in 11 x 14" trays. He uses Kodak Polyfiber paper (10" x 500' rolls, single-weight glossy, Catalog No. 186 2994, Spec. No. 250). His exhibition prints are processed to archival standards, toned in gold chloride (Kodak GP-1), dried between blotters, dry-mounted and framed.

Banding is the implacable enemy against which Yang, as presumably all Cirkut photographers, wages constant and dreadful war. As soon as he has beaten it on one front, it insidiously re-emerges at another. Nevertheless, he has won enough "banding battles" to successfully complete "The Golf Course as Landscape Art."

I A P P

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ADS & NOTICES

IAPP members are entitled to free classified ads in the newsletter. Send to: IAPP Newsletter, John Stamets, 403 14th Ave. E., Seattle, WA 98112.

Wanted: to make contact with anyone who has modified a Nikon-F for panoramic use. Leon Callaway, PO Box 788, San Pedro, CA 90733.

Needed: I'm building a panoramic camera and need sources for this information: 1) how to make precision slits and materials involved, and 2) a schematic for a variable DC-DC regulator roughly in the range of 0-20 VDC, 1 amp (to regulate DC battery power). Paul Keck, 313 Linda Ave., Hawthorne, NY 10532.

For Sale: Cirkut #10. Folmer Graflex. Governor drive. Complete with gears and tripod. Very good condition. $2500. Bill McBride, PO Box 6237, Santa Barbara, CA 93160. 805-684-7268.

Widelux Repairs

By John Stamets

Widelux shooters at the recent IAPP convention had a lively discussion about the operation -- or non-operation -- of this 35mm swing-lens panoramic camera. The most common problem encountered by those present was the "banding" effect caused by uneven rotational speed of the lens It's manifested as dark/light vertical striations on the film.

In the case of the Widelux, banding can usually be cured by having the gear mechanism cleaned by a qualified repair person.

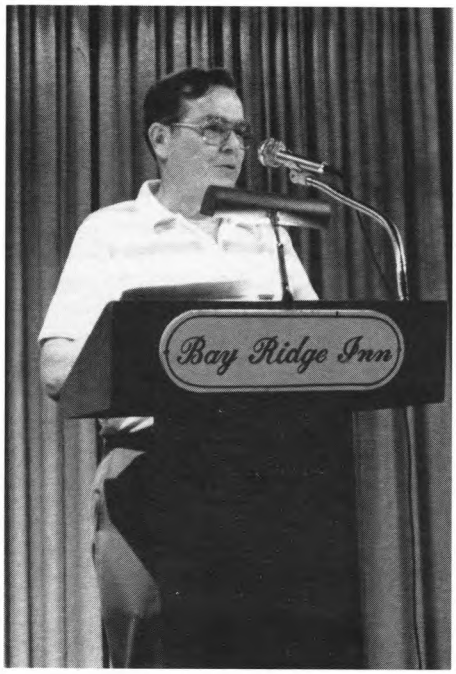
In the short term, you might alleviate the banding problem by pulling the lens turret to the right and releasing it. This "massages the shutter," effectively dislodging and redistributing any dirt in the mechanism. Mark Segal of Panoramic Stock Images says he does this several times before shooting each roll of film. In the long term, you may need to send the camera to a repair person for a professional overhaul.

So who repairs the Widelux? IAPP members at the convention pooled their knowledge and came up with three Widelux repair men in the USA. Costs for basic overhaul and cleaning range from $80 to $150. Without endorsing the quality of work of one shop over the other, the addresses are listed here, from east to west. Call first.

Joe Valgoi - (212) 594-6340
Swiss Camera Repair
38 W. 32nd St. Rm. 1206
New York, NY 10001

Bob Watkins - (312) 236-8546
Photo Equipment Diversified
230 N. Michigan Ave.
Chicago, IL 60601

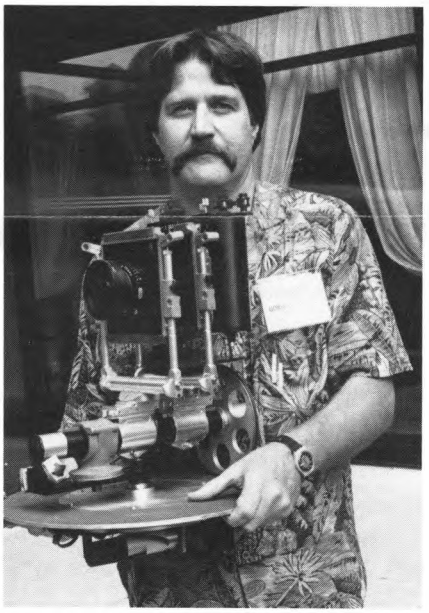
Kornelius Schorle - (714) 250-7073
Pro Photo Connection
17851 Sky Park Circle #C
Irvine, CA 92714



IAPP Executive Secretary Richard Fowler speaking at the convention banquet.

A panoramic family: Ed Segal (center) of Capitol Photo in Washington D.C. and his sons Doug (left) and Mark (right) of Panoramic Stock Images in Chicago.

The Mexico City contingent: (left to right) Humberto, Carlos and Francisco Chavez and Humberto Hernandez.



Donal Holway of New York City with the Globus-Holway camera for 5" roll film.

David Paskin (kneeling) explains his re-built Cirkuts as Bob Schwalberg prepares to Pop a Photo.

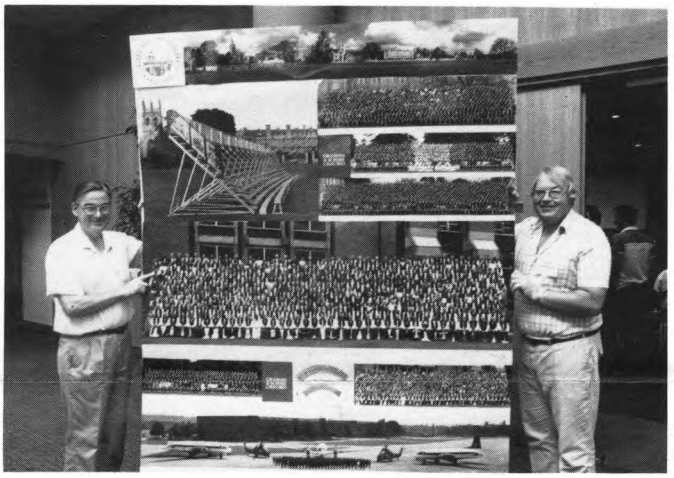
Convention Photos by John Stamets

(except pp. 8-9)

Popular Photography's *Bob Schwalberg stayed for the entire convention and bought us beer by the bucket!*

Karl Heitz and the Alpa Roto camera.

Rick Corrales with one of his 360° cameras for 35 mm film.



Ben Harris and Bernard Crapper of Oxford, England prepare their display for Trajan Staging.

Philip Foss (left) and Jerry Wood pose for a Widelux photo at the 4th IAPP Convention in Annapolis, Maryland. Foss, the Kodak Rep, is standing with his self-built rotary reflex camera, as decribed in the text. Jerry Wood hosted the convention and is the man responsible for the fine printing of this newsletter.

Fourth IAPP Convention Highlights

- from p. 3

Brad LaPayne (305 N. Prospect Ave., Champaign, IL 61820) specializes in Cirkut No.10 portraits of professional football and baseball teams, as well as classic city skylines. His color posters are finely printed and reasonably priced.

Fitting format to subject matter perfectly, Harry Fridman of Puerto Rico used a Fuji G617 to photograph a bikini-clad Miss Puerto Rico lying on the beach.

This writer's personal favorite of the exhibited prints, after Berticevich's Tibetan monks, were the black & white Chicago skylines by Tom Yanul. In a future issue, we hope to have more about Yanul, his cameras and his art.

Marketing Panoramic Photos

Marketing panoramic photographs was also much discussed at the conference, with examples of everything from hotel murals to panoramic cards and posters, to panoramic AV presentations. The Seitz/ Solecta/Tekno team pushed spectacular scenic photography for the magazine, resort and corporate art markets, showing recent examples from Europe. European magazines in particular seemed more receptive to panoramic images than their American counterparts.

Mark and Doug Segal of Chicago explained how their business, Panoramic Stock Images (230 N. Michigan Ave., Chicago IL 60601) sells images to magazines and advertising clients; and what types of pans they want from photographers.

Classic city skylines, especially at twilight, almost always sell well, as do country landscapes. Most images in PSI's files are from the Fuji or Linhof 6x17cm cameras, or similar 6x12 cameras. About 20 percent are from rotating cameras.

The Next Convention

It's not too early to talk about the 5th IAPP Convention, tentatively planned for 18 months after the 4th Convention, or about spring of 1990. A good host committee is most important, something which made the recent gathering a great success.

Site suggestions for the 5th IAPP Convention included the Bahamas, Kentucky, and Orlando, Florida where we have a number of active members nearby.

Any ideas or suggestions? Contact IAPP President, David Paskin, 11304 Taffrail Ct., Reston, VA 22091.

More Photos

pp. 2, 3, 8, 9,14, 15

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