

MAGNAchrōm

The Alternative Journal of Medium and Large Format Photography

VOLUME 1, ISSUE 5, BUILD 1

The night photography Issue

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MAGNAchrōm



MAGNAchrom v1.5



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Volume 1, Issue 5
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CHIEF TECHNOLOGY OFFICER:
Bob Kuszewski

ADVISORY BOARD:
Banefsheh Etehmam, Lance Keimig, Liz Haywood-Sullivan

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Unlike the first three issues of MAGNAchrom which were produced with a horizontal page format, this issue inaugurates a new vertical page size of 8 1/2" x 11". This format will facilitate delivering MAGNAchrom to you in alternate media such as print-on-demand and CD-ROM. Additionally, we have decided to output the PDF version in side-by-side format of 11" x 17" simplifying the viewing of panoramic spreads. The upshot of this change is that you can only print individual spreads on your inkjet printer.

We suggest the following print settings:

1. Use a paper size of 11" x 17"
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3. Print at high-resolution on glossy or photo glossy paper



MAGNAchrōm

Cold-hearted orb that rules the night. Removes the colours from our sight. Red is gray and yellow white. But we decide which is right. And which is an illusion.
— *The Moody Blues*





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[THE SOAPBOX]

When I was a child, we played a game after dinner which we called "moonlight, starlight". The gang of neighborhood kids would band together and select one of us to hide amongst the shadows somewhere nearby. After a few minutes, the rest of us would, in unison, walk the property and chant the words "moonlight, starlight" over and over — giving the spook the advantage of hearing us well in advance — while the rest of us were eagerly anticipating that the chosen one would jump out at any moment and charge the group.

If one of us was tagged, then they would become the next chosen one. If no one was tagged, then the spook had to return again to the shadows to once again await the gang of excited children.

In actuality our game was generally played at twilight, but no matter, for a child it was a magical time of day. And the dark shadows and murky colors only added to the fun. Great memories.

From that time forward, the evening has offered special appeal to me. And it is clear that for many other artists, such quiet time offers a unique respite from the travails of the day. Which might very well explain the popularity of night photography. Many artists indicate that the solitude and lack of "busyness" is an exceptionally rewarding time to pursue their craft. Others are enthralled with the unique palette that only artificial lighting offers. And then there are those that recognize that long exposures them-

Moonlight, Starlight

selves capture a unique "slice of time" and as such offer a special view on a hidden world not visible to the naked eye. Nighttime is elusive, flirting, dark and mysterious. It is the antithesis of our daytime world.

This issue of MAGNACHROM is dedicated to those artists who love night photography. We have gathered together a small sampling of artists from around the world who have explored the nighttime environment. What was a pleasure was to discover just how broad a range of both stylistic as well as technical differences that exist among these people. I hope you find information here that is helpful in understanding why these artists brave the elements and give up their evening hours to capture images that are at once haunting and exciting. There is no doubt that all are dedicated to their craft as shooting at night requires the literal patience of a saint.

For me there is no question that we will reprise the night photography issue again in a future issue of MAGNACHROM.

J Michael Sullivan



Photograph of your's truly taken by Megan Sullivan. RB67 and 37mm fisheye lens, 1 second exposure f5.6, Kodak Portra 400NC



CONTRIBUTORS v 1.5

J Michael Sullivan

USA. Boston-based J Michael Sullivan has been writing about scanning, design, and digital photography for nearly 18 years. His first digital scans were made in 1989 using Photoshop v1.0. He is the author of one of the first layperson's book on flatbed scanning: *How to Make Your Scanner a Great Design & Production Tool* which was published by North Light Books in 1994 and reprinted as a second edition two years later in 1996.

Formerly a Contributing Editor at HOW Magazine, he also has extensive experience lecturing at MacWorld and The Seybold Seminars throughout the 1990s.

As editor and publisher of MAGNACHROM he feels nothing rocks more than a BIG camera. Mr. Sullivan has been shooting professionally with medium and large format equipment since the late 1970s and owns a bunch of big cameras.

Larry Wright

USA. Larry Wright's earliest photographic influences were Life and National Geographic magazines. Growing up in southern Oregon, surrounded by mountains and forests, he learned a deep appreciation for the natural environment. Like so many people, he started with a Kodak Brownie camera and later moved to a 35 mm. In the early 80's, he bought a 4X5 camera and that was the real beginning of his serious photography. He works almost exclusively with traditional black and white materials. He lives in a small town in south central Washington State, where he works in entomological research. He has won several local photography awards but these are his first photos in an international publication.

Kit Courter

USA. Kit Courter is an advanced amateur photographer who lives in Torrance, California. An avid outdoorsman, he has been exploring the world of night photography since the mid-1970s. Kit began using a 2x3 press camera in 1982 and a 4x5 field camera in 1989. While principally relying on the moon as a light source, he has also explored starlight using digital media. Not satisfied with the traditional trial-and-error approach to night photography, Kit has developed a mathematical model of moonlight and starlight brightness that he uses to accurately determine camera settings and exposure time to produce pre-visualized results. His work generally depicts the presence of man circumstantially, rendering that presence as the glow in the sky from a distant city, or a streak of light through a night landscape. Kit considers his primary photographic influences to be Minor White and Elliot Porter. He founded LunarLight Photography in 2001.

Ken Wronkiewicz

USA. Ken Wronkiewicz is based out of the San Francisco Bay Area. He's been shooting continuously since he was a grade school kid and still uses the camera he had when he was in grade school. He discovered light painting and long exposure photography when he finally picked up a tripod and became passionately interested in the subject, adding people to his compositions and building his own computer-controlled lights.

Matt Gorringer

AUSTRALIA. Matt Gorringer has been working in the dark from the age of seven when he made his first black and white print in his father's darkroom. The magic hasn't faded and he still enjoys printing in black and white on silver-based materials. His work in urban settings is one aspect of a broad interest in landscape photography with a focus on the variety of relationships between humans, their environment and the beauty that can be found almost everywhere. Matt uses medium format view cameras for their control and portability. His camera backpack is usually with him wherever he goes, often with the forbearance of his family, who would rather he carry something useful.

Eric Biggerstaff

USA. Eric has been engaging his interest in photography since he was eleven years old. He first used his camera to record the many backpacking and rockclimbing trips he made as a young man and later, after college, began working with medium format and large format cameras to explore the world in a more artistic way. Since 1995, Eric has used a 4x5 camera almost exclusively and is a dedicated traditional darkroom worker and a frequent contributor to View Camera magazine.

Danny Spence

USA. Danny Spence is a photographer living in West Texas. He first became interested in photography at a young age when he was given a 35mm SLR to photograph family vacations. After graduating from college, Danny quickly discovered that his money is solely spent on photography, not generated from the act of creating it. He photographs using a variety of film cameras and formats. He grudgingly realizes that he needs to choose one camera and format and stick to it, but the cameras seem to be breeding and multiplying in his studio. He's currently obsessed with large format and even built his own LF enlarger. He greatly enjoys black and white darkroom work and processes and prints his own film.

John Paul Jespersen

USA. John-Paul Jespersen was raised in Salt Lake City. Surrounded by the diverse landscape of Utah he picked up his first SLR at the age of 14. At the age of 19 John-Paul began college at The Brooks Institute of Photography in Santa Barbara, California. After receiving his Bachelor of Fine Arts degree specializing in industrial scientific photography he moved back to Salt Lake City and began working on his personal project called Images of Night.

John-Paul uses long exposures and the light of the moon to create surreal daylight looking images. He is very motivated by the moonlight and it has been the driving force in his personal work. He plans to continue his Images Of Night project indefinitely while traveling the landscapes of the world and searching for places which convey his message of the shocking and confusing beauty in the interaction between man and nature.

Brian Vuilleminot

USA. Brian Vuilleminot has always been fascinated with the workings of nature. Starting as a child, and continuing throughout his life, much of his time has been spent seeking refuge away from civilization. He developed an interest in photography as a way of recording the natural wonders he experienced to share with others. Brian's photography seeks to capture the ephemeral- brief moments of time when sublime light and fleeting weather conditions co-exist. Living in an imperfect, disorganized world, he finds the creation of order within a photograph to be extremely fulfilling.

The subjects Brian photographs have emerged out of his interest and professional training in biology, ecology, and geology. He has photographed extensively in the Colorado Plateau, Chihuahuan Desert, and Bisti Badlands, a rarely visited moonscape in a remote section of northwest New Mexico. Brian's current photographic projects include the geology, ecology, and human history of the California coast, Owens Valley, Death Valley, and Mojave and Colorado Deserts. Brian works in the 4X5, 4X10, 8X10, and 6X17 (cm) formats, creating many of his photographs in the low light conditions that exist before sunrise and after sunset.

Tom Paiva

USA. Tom Paiva is a professional, freelance photographer based in California and has had his own business for over 15 years. He specializes in large format photography of industrial and maritime settings, as well as architecture and interiors.

Tom has over 70 cover images for various Trade Magazines to his credit. He has published a book, *Industrial Night*, containing 46 color images of industrial settings at night.

His long term passion is night photography and he loves to create images of urban settings and moonlit landscapes on film. He was a cofounder of The Nocturnes, a group of nightphotographers who had a landmark exhibit in San Francisco in 1992.

He has co-lead photo workshops on night photography and view camera use over the past 6 years and has had several articles on these subjects in photographic magazines. He was educated at the San Francisco Academy of Art, where he earned a Bachelor of Fine Arts degree. He was an Artist in Residence at the ship "Jeremiah O'Brian" in San Francisco in 1993.

Submit your work to 4-Square!

4-square is a new, regular article in MAGNACHROM that will feature four medium format, square photographs of one of our registered users. The images must be shot with a medium-format camera and rollfilm and must be square. Large format film cropped square will be disqualified.

To be considered, send email to foursquare@magnachrom.com with the information shown below. If chosen, you will need to supply four photographs sized to 2250 x 2250 pixels in RGB JPG (high quality) format. Images should not have any borders. FTP information will be supplied to those that win. If you are not chosen, please submit again for the next issue — there is no limit to the number of times you can submit. Winners however must wait one year before submitting again.

About you:

Your Name

Your MC email

Your Website

For each of four square images:

Title

Camera

Rollfilm

Exposure

Lens

Year taken

Location

Link to photo

One of the main reasons I’ve continued to pursue photography is that it’s a thoroughly therapeutic process, the time I spend making photographs is an end to itself. I remember reading once that it is questionable whether the passion and creative drive felt by the artist can ever truly be understood by the viewer; I suppose that’s mark of a ‘true artist’ but I don’t let that stop me from blundering along in my own blissful ignorance, just enjoying the time spent out photographing without worrying about how it will be received.

This emphasis on the process, as opposed to the final print, is one of the reasons why much of my work has been night/low-light photography. The contemplative process is given a chance to rise to the surface because of the excessively long exposures, for me — anywhere from two minutes to an hour. Quite simply — I enjoy being out taking photographs, and the time spent waiting for an exposure to complete is not a waste to me, I’d rather be sitting around waiting for a great photo than walking around snapping off many snapshots. This was not always the case, when I first started photography 2 years ago it was in the most cliché way possible: shooting with an older 35mm SLR (a Nikon F2 I bought with a 50mm lens) with very high-grain film (Fuji Neopan 1600) taking “street” photographs.

At that time I became enamored of an idea I read that said something along the lines of “when you develop a roll of film, you want to see thirty-five bad shots to show you’re trying something new, and one good shot to prove you’re not a total hack.” Although I took comfort in this when I was learning the ropes of photography (especially when I’d get back slides that were far too dense due to underexposure) in time I found myself getting more and more ‘keepers’ — which better suited my ego.

So when I saved up a bit of money (around \$1500USD) and had to decide between getting a DSLR or something else, I went with a 500C/M, buying the body in Japan and an 80mm C T* with two A12 backs while I was visiting the States. While I was there I also bought a Kiev TTL spot meter prism as I wanted a spot meter to supplement my Gossen Luna-Pro F. I find a spot meter very valuable for night photography — as I don’t always like using an exposure that will allow enough light to make the scene well-lit. Instead what I’ll do sometimes is take a spot reading of the brightest area of the scene I want to photograph, then open up two stops, I find for night-photos that I don’t mind having large areas of darkness, but I’m not too keen on overblown highlights that often result from having longer exposures.

I’m considering acquiring an 8x10 setup, instead of buying more Zeiss lenses — the appeal of individually developing shots, being able to make contact prints, as well as the movements are all very tempting to me, however the cost is not. I’m looking forward to future issues of Magnachrom to help me find a suitable balance between price and performance for me to make this final (hah!) photographic expenditure.

— Alex Watanabe

4-Square: Alex Watanabe

Four, square, medium-format photographs
by Alex Watanabe of Japan, one of our registered users.

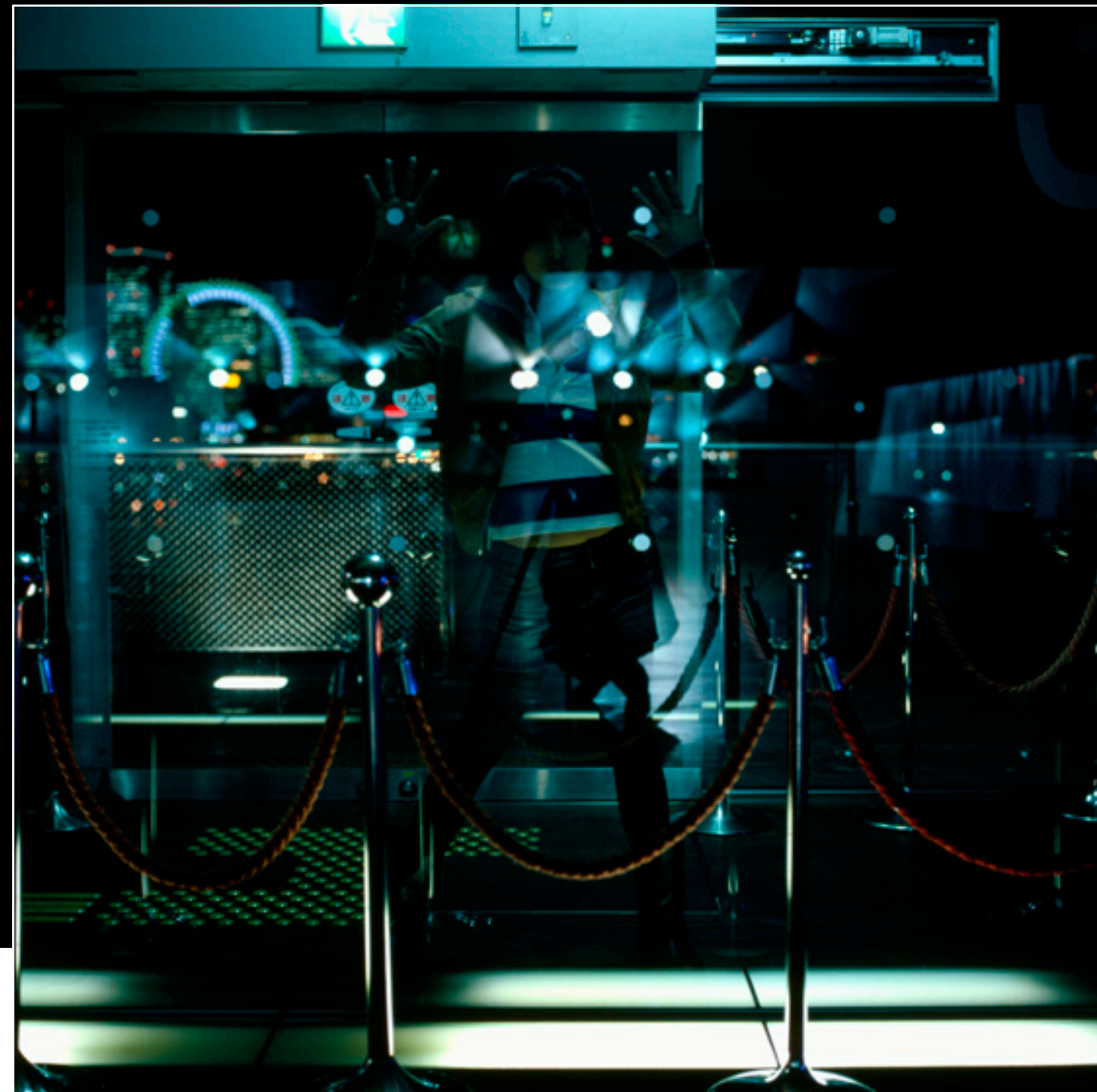




4-SQUARE: ALEX WATANABE

koh samui 05

Camera: Hasselblad 500C/M
 Rollfilm: Fuji Neopan 100
 Exposure: 20ish minutes at f8
 Lens: 80mm C T*
 Year taken: 2007
 Location: Chaweng Beach, Koh Samui, Thailand



Ms. Hirokawa 10

Camera: Hasselblad 500C/M
 Rollfilm: Fuji Astia 100F
 Exposure: 1-2 seconds at f8
 Lens: 80mm C T*
 Year taken: 2007
 Location: Yokohama, Japan

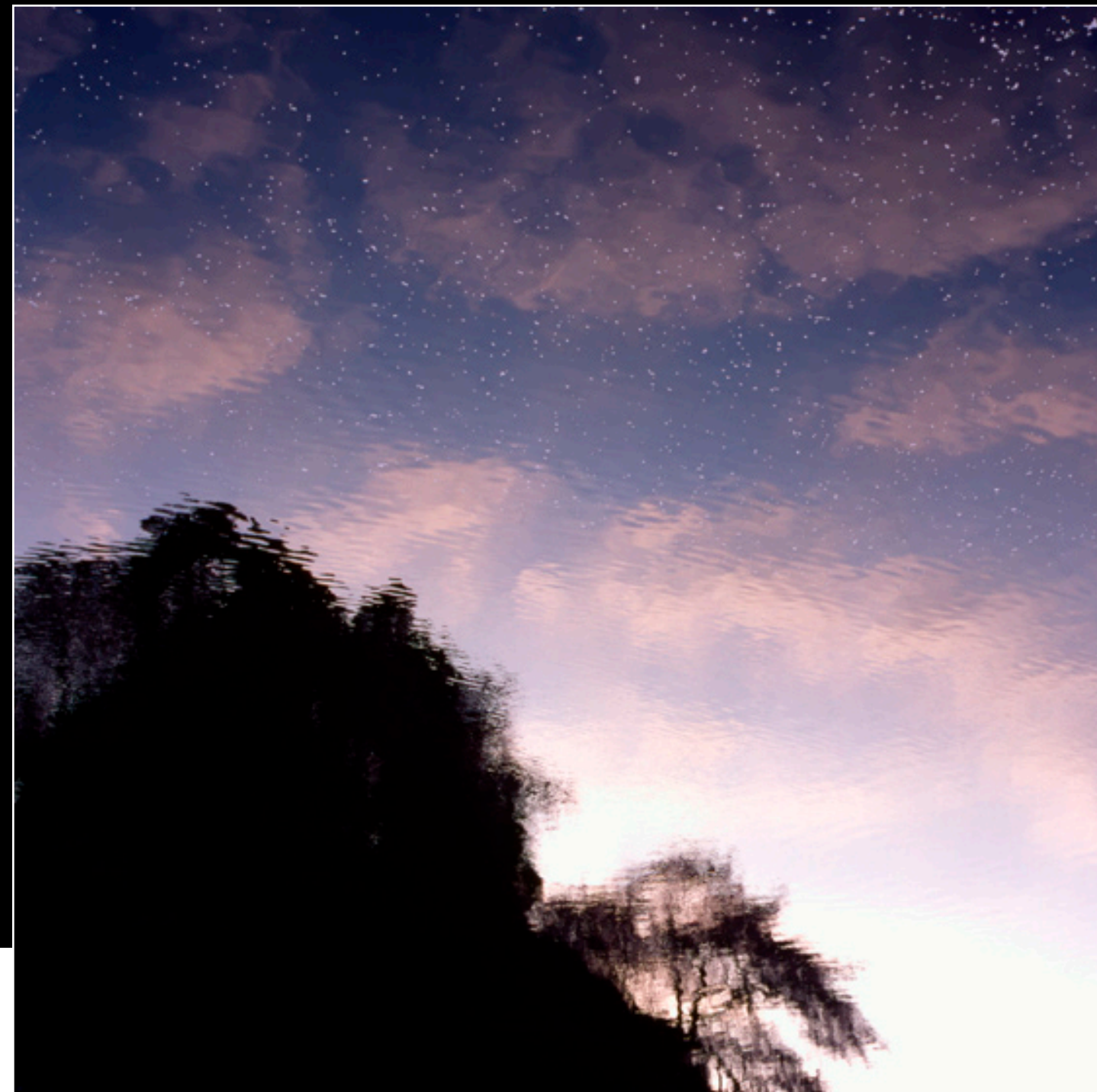




4-SQUARE: ALEX WATANABE

aspiring dominations 05

Camera: Hasselblad 500C/M
 Rollfilm: Fuji Neopan 100
 Exposure: 3-4 minutes at f8
 Lens: 80mm C T*
 Year taken: 2007
 Location: Kagurazaka, Tokyo, Japan



en plein air 02

Camera: Hasselblad 500C/M
 Rollfilm: Fuji Velvia 100F
 Exposure: 1/15 at f8
 Lens: 80mm C T*
 Year taken: 2007
 Location: Imperial Palace, Tokyo, Japan



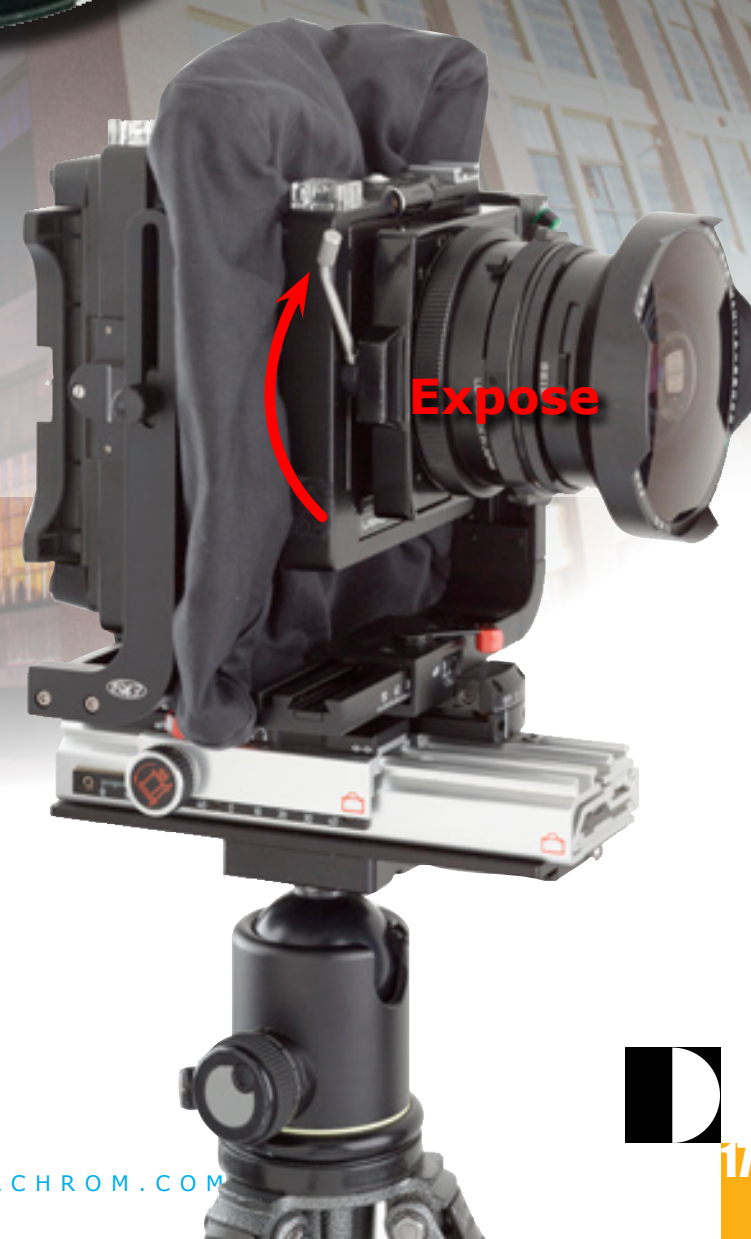
[HOT MODS] Large Format Fisheye

shown actual size of 111mm (4.4in) diameter

Back when I was shooting small format professionally, I dreamed of a fisheye lens. Trouble was, I could never cost-justify it. Years later I no longer have to justify it so on a lark I thought it would be cool to mate a medium format fisheye to my Linhof Technikardan.

As there are no large format fisheye lenses, the first thing to do was to choose from among the few available fisheye lenses manufactured. Wanting the largest coverage possible, that left either Mamiya RB67, RZ67 or Pentax 67 as logical choices. I eliminated the RZ67 version as it required electronics to fire the shutter, significantly complicating the custom modification I was after. That left a choice between the RB67 or the Pentax 67, both of which are mechanical lenses. With its built-in leaf shutter, the Mamiya RB67 might be a more complete solution, but it had a proprietary cocking/firing mechanism that would be difficult to duplicate. Just to check I looked on eBay to see if any cheap RB67 bodies were for sale and bingo, there was a “Buy Now” for \$89. So I took a chance and ordered the body. Good thing I was only looking for the bayonet mount — the rest of the camera was a mess and not worth repairing.

So I took it apart and determined that yes, the



[HOT MODS] continued...

bayonet mount together with the firing mechanism “could” be removed from the RB67 body and mated to a Linhof-style lens board. All I needed was the expertise of S.K. Grime to pull it off.

Having removed the bayonet mount from the bellows, I played with the mechanism until I understood how it worked. In particular, the RB67 uses a shaft that via some gearing both cocks and fires the shutter. The length of this shaft was approximately 100mm long and would need to be trimmed and fitted with a handle that would have to sweep 180° in order to be able to work the shutter properly. I produced some full-scale sketches and sent S.K. Grimes the bayonet, a spare RB67 lens, and a spare Technika-style board onto which I needed the custom mount applied. A key deliverable was a threaded 67mm female thread on the rear of the mount so that I could mount a “normal” filter to the back of the custom mount, thereby allowing me to make use of my extensive collection of 67mm filters.

About 60 days later, I got the package back from S.K. Grimes. Eager to see what it could do, I mounted it onto my Linhof Technikardan 45S and used the groundglass to view the coverage. The image circle is approximately 93mm (see images at right). One of the first things I noticed was that the four small “lens shades” in each of the four corners were visible and impacted the overall size of the image. Others have suggested cutting off those four protruding fingers, but I have decided to leave them on for now, especially given that they provide a bit of protection for the lens.

One of the first things to do was a test shot with my Better-Light back to see what kind of resolution this baby was capable of. Immediately evident was that the center was quite sharp, whereas the corners exhibited significant chromatic aberration. Fortunately, Photoshop provides a tool to eliminate such chromatic aberrations and with some fooling around I was able to eliminate it.

I have made 20”x20” prints from this lens and they look fabulous. Needless to say, it takes some getting used to using a fisheye as it is easy to overdo it. But I must say, having a big sheet of film to work with is a joy.



thread for 67mm filters on backside



Shot at night in Clinton Massachusetts with Fuji ReadyLoad color negative film. Exposure 20minutes @ f11. Shown full size.

Capturing The Feeling Of Ambient Night

By Kit Courter

The night is a velvet place of refuge, a place to observe and make intelligent all that lies about. Night has a sense to it that is calm as the day is energetic, contemplative as the day is active. It is that sense of the ambient night that I have been striving to capture in images these past thirty years. Night photography gives a great vantage from which to understand the landscape, the natural passage of time and the motion of man.

For very long exposure work, I prefer to use a view camera. The view camera is not a tool of convenience, but one that forces the photographer to consider the essential reasons for making a photograph. In return for superior image quality, its use demands mental rigor, patience, and craft. It provides a final hour to consider how the camera can bring the intended image to life. It is essential to know the camera setup will support the visualized image when the exposure will be several hours in



duration and may not be readily repeated.

Using a view camera in the dark of night requires great patience and perseverance. The basic motions required to set it on the tripod, get it leveled and generally pointed in the right direction are easy from long practice. However, perspective adjustment, focus and framing are all but impossible without working out ahead of time just how to perform an essentially visual task without sufficient light to see. Under moonlit conditions, the moon offers a convenient (though small!) lit target for achieving focus. By positioning the moon sequentially in the four corners of the ground glass, both focus and lens board alignment to the back can be achieved. Lacking the moon, placement of a bright flashlight in the field pointed back toward the camera can serve a similar function. In a pinch, distant pinpoint light sources can be used, but it is harder to focus on an item lacking surface contrast, and not all scenes contain bright arti-

cial lights.

Framing can be achieved through dark-adapting the eyes under a dark cloth or behind your hands before looking for essential framing elements on the exceedingly dim ground glass. A high-power spot-lamp shown onto the scene can assist in finding the edge of the frame, and one can find bright stars on the ground glass by not looking directly at them. Rest the eyes often to avoid fatigue, as it usually takes an hour or more to get the camera set up and framed properly. And anticipate the final image will contain surprise elements that were not seen in the dark; studying the intended scene with a high-power spot-lamp is a good idea. For an image conceived well ahead of time, it is possible to set up the camera prior to sunset, which greatly eases these factors.

Determining exposure is the largest obstacle to overcome, since bracketing very long exposures is often not possible. Over the years, I have devel-





oped an accurate exposure calculation technique that is too involved to describe here, but is available on my web site. Exposures of less than three hours usually make use of a near-full moon. Very long exposures to get sweeping star trails usually start well before the moon rises, with a morning crescent moon providing fill light near the end of



the exposure. I find artificial fill light intrusive and do not use it.

Further discussion of the techniques used, especially for calculating exposure, may be found on the LunarLight Photography web site at <http://home.earthlink.net/~kitathome/LunarLight>.

There's a certain amount of standard advice for shooting night photography. Traditionally, people were told to shoot either Fujichrome 64T (now T64) or Kodak Ektachrome 160T (which has now been discontinued). Both films were well-behaved and well-characterized tungsten balanced slide film. With slide film, you don't need to worry about automatic machine corrections like you do with print films, so that's easy to understand. Both films have about as reasonable figures for long-exposure reciprocity as you'll find in a manufacturer datasheet.

But, tungsten color balance? Why do most night photographers shoot using tungsten color balanced film, or the tungsten setting on their digital SLRs?

I hate hearing standard advice without a justification. I like to research things to understand why the advice is given and to know when I can break these rules. To understand why this is the standard advice, and furthermore, why this is advice I ignore frequently, you need to understand the color of night.

The eye compensates for a lot that film can't compensate for. For example, if you look at a white sheet of paper on a clear day, it will appear to be white. If you take that sheet of paper indoors and look at it under a normal incandescent light, it will still appear to be white. However, if you were to photograph that sheet of paper with daylight-

balanced film (or the daylight color balance on your digital camera), it will be white outdoors and distinctly yellow indoors. If you photograph the same sheet of paper with tungsten film, the opposite will be true. It will be slightly blue outdoors and white indoors.

MESOPIC VISION

At night, things get even more interesting. The correct measured color temperature for night is actually daylight. However, if you are out at night, you wouldn't believe it, because night always looks awfully blue tinged, very much like tungsten balanced film.

In order to understand what's going on, you need to understand the way the eye works. Most people know that the eye has rods and cones and that the rod cells are active when there's not much light and the cone cells are active the rest of the time.

As light dims, the higher total sensitivity of your blue-sensitive cone cells and the way that the rod cells are processed by your brain, your perception of color shifts things towards blue, so even though you are dealing with normal daylight colors, things start to take on a blue hue. This is called Mesopic vision.

Movies take full advantage of this. If you underexpose your images by a stop or two and shift your colors towards blue, it will look like night, even in broad daylight.



Dark Angel by the Lake

This is one of my big areas of exploration... having a model in a long exposure scene. I've found that good models can hold still enough for upwards of a minute without moving.

This was taken with Provia 100F. Velvia would have been too high of a contrast for these purposes and I figured that the tungsten balance would make the background colors too blah.

I shot this with an RB67 and the 90mm C lens.

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Thus, even though we are distorting the color balance in technical terms by shooting tungsten balance at night, it feels more correct, both because of meopic vision and cultural baggage.

SO WHY SHOOT DAYLIGHT FILM AT NIGHT?

Troy Paiva [Tom Paiva's brother, ed] of Lost America writes "The other problem is with shooting in urban conditions where man-made light sources will shift colors turning your images a murky green or brown. Sodium Vapor is the worst and it's, unfortunately, the most common"

I do not want my images of nighttime urban scenery to look that majestic. I prefer my sodium vapor lights to become like the brilliant gold of pyrite, unless I'm trying to say something.

Under the Manhattan Pier

I took this one while I was in LA on business. One of my buddies in LA and I met up in Manhattan Beach and I decided it was a nice beachfront town to go exploring in. I've always liked climbing underneath bridges and things, so I walked underneath the pier and saw this scene.

I took this fairly early along on my exploration of night photography. I made a vague guess at exposure based on some test exposures with my Canon A95.

I used Velvia 100, which I had been specifically told was not good for long exposure shots, but I like it here. The colors would have been much more muted and boring with tungsten balanced film and the Velvia gives it a pleasant kick.

I shot this with a 50mm lens on my Canon TX.

Low Pressure Sodium vapor lights

These are the most efficient form of illumination out there. They rely solely on the illumination from a sodium vapor arc. Light is concentrated on a single monochromatic line of wavelength 589nm. It doesn't matter if you are shooting tungsten or daylight, you aren't going to get anything other than yellow, no matter how many filters you add.

Astronomers love these lights because you can get a filter that just knocks out the 589nm line and nothing else and pretty much nothing observable in space has that 589nm line.

High Pressure Sodium vapor lights

These lights add mercury to the mix, so they aren't totally monochromatic. With several stop's worth of filters, you can make them look white on daylight film. They look blue tinged on tungsten film.

You can tell the difference between the two because the low-pressure lights are a more saturated and pure yellow. Out where I live, there are places with both types right next to each other, which helps to one tell the difference.

Florescent Lights & Mercury Vapor lights

These are much closer to white than either type of sodium vapor lights, but they tend to appear green on film unless they have been carefully color balanced, or you use sufficient amounts of filtration.

Tungsten & other incandescent lights

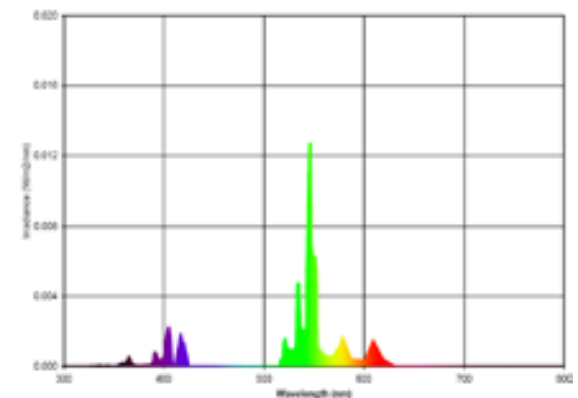
These lights are just light bulbs and will appear yellow on daylight film and white on tungsten film.

Colored lights

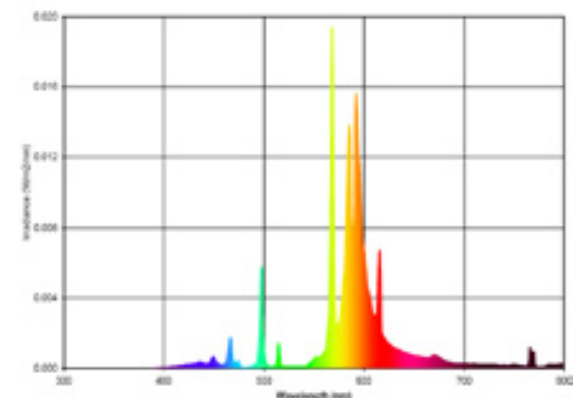
At night is when the colored lights come out. Colored neon signs light up, red warning beacons light up on antenna towers, and all sorts of colored architectural bulbs are lit.

Moonlight

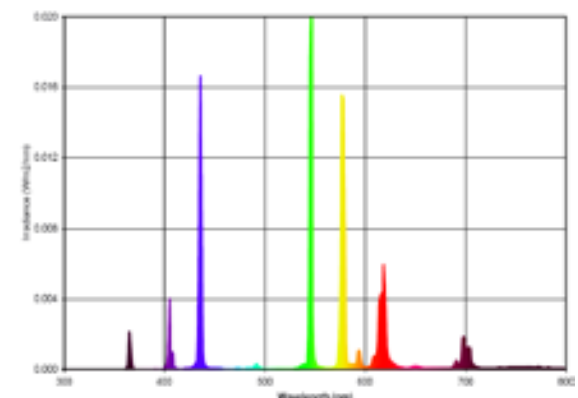
The moon is pretty close to gray, so moonlight is actually rather white. I've taken pictures at night where you can't tell that it's actually night because I used daylight film.



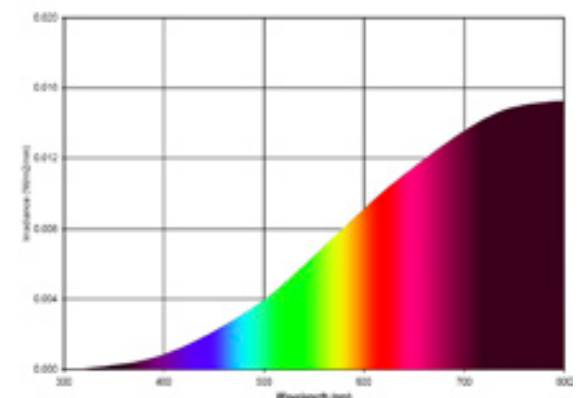
LOW PRESSURE SODIUM



FLUORESCENT



MERCURY



INCANDESCENT



RECIPROCITY

Normally, film obeys a pretty simple set of rules. For example, say you are in daylight and your camera wants to shoot at 1/125 and f/16. You can shoot at 1/250 and f/11 or you can shoot at 1/60 and f/22 and in each case you will get the same exposure. This is called “Reciprocity”

Reciprocity only holds for a certain exposure range. For example, Provia 100F only obeys reciprocity between 1/4000 and 128 seconds. At shutter speeds faster than 1/4000th of a second or slower than 128 seconds, some adjustment is needed. This exact range is different depending on the film... generally modern films are going to behave better than older films. Tri-X, for example, is only good between 1/1,000 and 1/10.

However, what happens when you are outside of that range? Well, reciprocity doesn't hold. You may measure an 8 second exposure at f/2.8. You'd think that if you stopped down to f/4 you would have a 16 second exposure, but after correcting for reciprocity failure, you end up with a 20 second exposure. Furthermore, if you are looking at color film, each layer will have slightly different reciprocity, so you may also need to use a colored filter to adjust the color balance back to normal.

Reciprocity is a little tricky to fully grasp. If you look at the data sheet for Tri-X, you will notice that they indicate you should adjust development for long or short exposures outside of the normal exposure range. This is because contrast builds up with reciprocity. Normally, a stop represents a doubling or halving of light, but once you encounter the reciprocity effect, you need a little more than a doubling or a little less than a halving of light to move up or down a stop. As a result, for long exposures, between the inherently high contrast nature of many nighttime scenes and the added accumulation of contrast from reciprocity, you generally want to pull your development and



Daylight vs. Tungsten example #1

Notice how some of the yellow lights in the first picture are whiter in the second one while others aren't. The lights that didn't change much in color are low-pressure sodium vapor lights and the lights that did are high-pressure sodium vapor.

potentially use a compensating developer with black and white film.

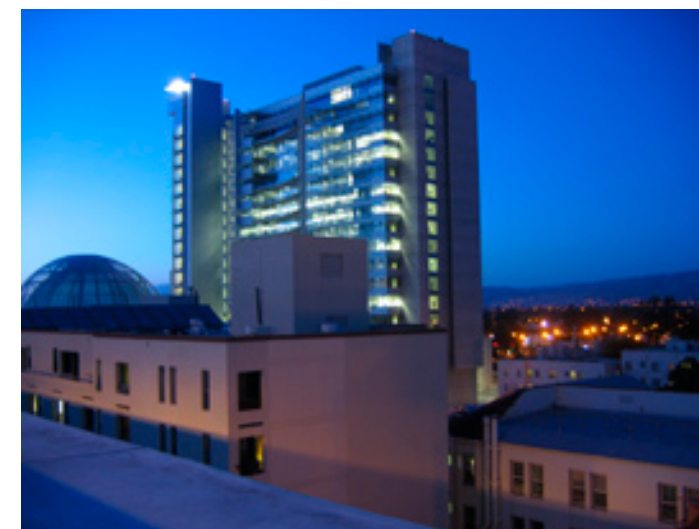
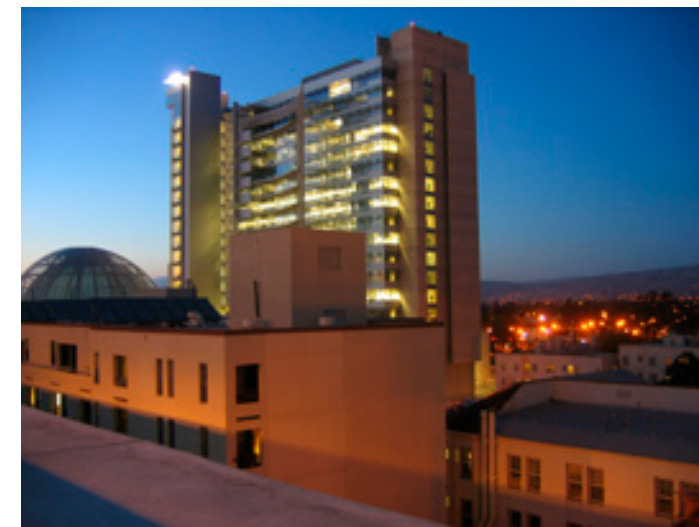
Eventually, you will reach a stopping point with a film. With color film, eventually you will have color crossover where you can no longer fix the colors with a simple filter. With any film, eventually you will reach a point where the reciprocity goes nearly to infinity and you'll catch daylight before you expose enough.

If a piece of film is exposed quickly, even if the shutter is open for a long time, reciprocity is not a problem. Star trail pictures are a great example of this. Fill in flash will always be true-to-color.

There's an article that was floating around in one of the other photographic publications where somebody claimed that taking ten 10 second exposures would suffer less reciprocity than a 100 second exposure. I've tested it and I don't think it's true. Most film data sheets indicate a separate set of reciprocity corrections for multiple exposures with some of them indicating that the color shifts in a totally different direction.

COLOR SLIDE FILM VS. COLOR PRINT FILM

The advice has always been to shoot slide film for long exposure instead of print film with color. The standard advice used to be that you should shoot slide film so you didn't have to worry about the guy at a minilab trying to figure out how to print it. With modern desktop scanners, you don't have that sort of problem, but slide film still works better, largely because it has much better reciprocity.



Daylight vs. Tungsten example #2

Notice how twilight is still fairly daylight balanced here. The lights in the building are fluorescents.





Daylight vs. Tungsten example #3

The top light is a reasonably modern fluorescent light. The middle light is a low-pressure sodium vapor light. The bottom light is a plain mercury vapor light.

Were we to be surrounded by just the mercury vapor lights with no other color reference, you wouldn't notice the green.

MAGNACHRŌM

1ST ANNIVERSARY ISSUE #2.1

Article/portfolio submission due date: August 15th 2007
send email to editor@magnachrom.com

SOME FILM EMULSIONS I'VE USED

I looked through the list of films I use and discovered that all of the films I use for long exposure are made by Fuji. This is not to say that the Kodak and Ilford films are inferior, just that Fuji films work better for long exposures at night for me. I use a great deal of non-Fuji film for my other photography.

Fuji Neopan 100 Acros

This is my favorite black and white film at night for long exposures. It has the best reciprocity behavior of any standard photographic film. I usually stand develop it for an hour in Rodinal 1:100 with the only agitation being 5 twists at the beginning for a minute or two and 5 twists halfway through.

Fujichrome Professional T64

The best tungsten balanced film on the market at the moment. The only alternate film is Kodak Ektachrome 64T. Kodak used to make Ektachrome 160T that worked rather well for night usage, but 160T has been discontinued. This has been reformulated lately and I have more experience with the older version.

Fujichrome Provia 100F

Provia has the best reciprocity out of a color film at the moment. It requires very little adjustment and stays fairly true to color at long exposures. You can use the E-series of Kodak slide films, but the Fuji films tend to have better reciprocity.

Fujichrome Velvia 100

This is my personal favorite, although I'm kind of weird in that respect. Velvia 100 requires slightly more adjustment than Provia 100F, but I prefer the saturated colors.

Velvia 50, on the other hand, is not particularly suitable for long exposure. It color shifts astonishingly quickly.

Fujichrome Provia 400X

This is a recent introduction. Advertising claims call it a 400 film with a grain like a 100 film. It's not, but it's got decent reciprocity and won't have you sitting around waiting for a long exposure. I use it for light paintings with models when it's more important to not have the model blurry than have fine grain.



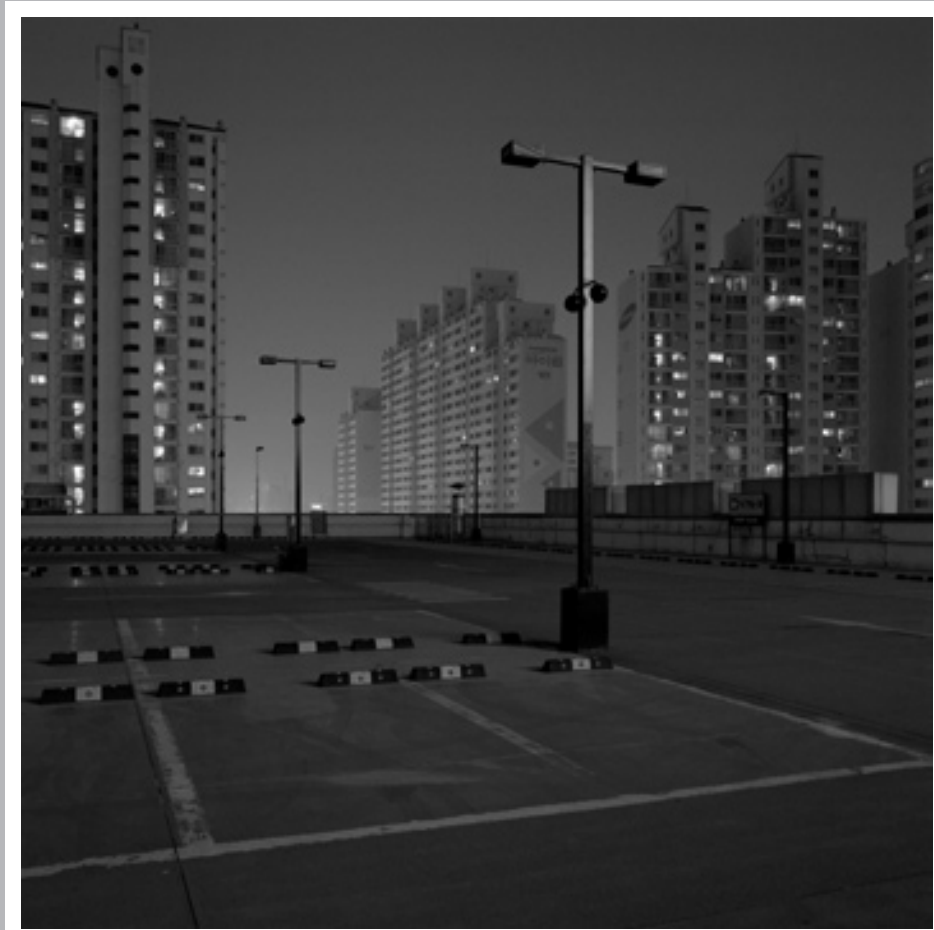
Night and the Built Environment

[or Goodnight Korea]

by Matt Gorringe

I first became interested in photographing at night when my wife and I spent a year living in her native Korea. We moved to Incheon, which is on the West coast, near Seoul. Incheon is a port city with a shallow sea that warms up in summer and becomes extremely humid. We arrived in June and for the next three months the temperature stayed above 30 degrees Celsius day and night and a thick fog rolled off the ocean. These were not ideal conditions for black and white photography during the day; the thickness and brightness of the fog made for very low contrast scenes and uninteresting results. This was initially a great disappointment to me.

Something that immediately struck me as visually exciting about urban Korea was the number and size of the apartment complexes that seem to be everywhere. Coming from Sydney, they were certainly a novel feature of the landscape. The repetitiveness of the shapes and the scale of the complexes caught my eye and became a fo-



Sinpo Dong: The local supermarket car park.

The parks and areas around the apartments were very well lit and there were people out walking or jogging at all times of the night; about 4am the old people would start appearing for their morning constitutional

Dong Incheon I: From the fire stairs.





Near Hyeong Seok's House: A little oasis.

cus for my photography.

Not long after we arrived, my wife and I had our first child and so my free time during the day became more limited. I started going out to take photographs after 11pm at night and was amazed at how well the thick fog suited scenes at night. With the sun gone, the fog didn't appear so thick and was actually a great advantage in lowering the contrast of night scenes and providing a beautiful depth to the images. This depth really suited the apartment complexes and made them seem more iconic and monolithic.

Later in the year my wife and I moved into one of the smaller complexes and I came to realise why many Korean people don't have the same negative associations with them that someone from Australia might. They are easily heated in the bitter winters with centralised under floor heating. While it was often minus thirteen degrees Celsius outside at night, our apartment never dropped below twenty-eight degrees. I also found the apartments very social places where we knew our neighbours well and would stop and talk with people waiting for the lift. They typically include children's play areas, parks and shops as part of



Song Do I: Under construction.

the complex and are generally very pleasant places to live.

The photos are intended to convey the scale of the towers, the number in each complex and to emphasize their repetitive shapes. I also attempted to include the gardens and parks that are part of most of the complexes as a context for the towers and as a contrast to the concrete. The shared areas between the towers are a reminder of the warm, social aspects of these environments in photos that are otherwise cold and devoid of people. Similarly the lights in the windows of people's apartments allude to the presence of the occupants as well as being visually interesting.

I used long exposure times between about 8 and 12 minutes to try to get as much information in the negatives as possible. The long exposures often provide that lovely, blurred movement in trees that reinforces the immovability of the buildings. By developing in dilute developers I was able to separate the point light sources from areas of bright reflected light. A pre-exposure of the paper also helps to do this and allows for more separation in the dark tones as well. The complete portfolio contains images made during the day, as well as at night.

You can contact Matt at matt.gorringe@gmail.com



Night from Our Place: Looking towards Yeonsu Dong.



Dong Incheon II: Massive.



Jung Dong Park I: A very foggy night.



Kirk Gittings: The Edge of Darkness

by Eric Biggerstaff

As the shadows grow black with the setting sun, most photographers begin to pack up their gear and head back to camp or home for the night, waiting for the first blush of dawn to bring new light and new opportunities to photograph. However, for well known architectural and art photographer Kirk Gittings, the edge of darkness brings on new and exciting possibilities for creative image making. Kirk believes that often the most exciting times of any day fall along its' edges, when the light is kissing the wall of a storm, when night is overtaking day or when dawn is pushing out the dark. It is in these conditions that Kirk enjoys working, and playing, with his large format cameras.

In a land of many well-known photographers, Kirk stands out amongst his peers in the New Mexico landscape. As a successful architectural photographer, his talents are in high demand amongst the architects, interior designers and "shelter" magazines throughout the southwest. In addition, Kirk is a busy artist hosting shows and events in many galleries and museums in the region and his work resides in numerous public and private collections. If that weren't enough every summer he moves north to teach at the School of the Art Institute of Chicago as a visiting professor of photography and is an active member of the Freestyle Advisory Board of Photographic Professionals. With the small amount of free time Kirk has, he enjoys roaming the New Mexico landscape searching out the unique and often crumbling architecture that seems to define New Mexico. From this body of work Gittings has produced two books, "Chaco Body" with Poet V.B. Price which



explores the Anasazi ruins found in the incredible Chaco Canyon and "Shelter from the Storm" by Gussie Fauntleroy, about Kirk's life's work, which takes the reader on a journey through the historic and modern architecture of New Mexico.

Over the years, Kirk has developed his architectural photographic technique to highlight the special glow that is found at twilight. This lighting brings a unique look to his work with the result being that his clients now come to expect a few of these images with each job Kirk does for them. As Gittings notes "I am looking for an effect that emotionally resembles a glowing Japanese lantern in the gathering darkness, warm and inviting. Architecture is designed as a shelter for people and twilight photography presents this relationship in a romanticized vision." This is very different from the look that we often see of buildings lit from within in the dark, an effect more closely like that of a bright lighthouse or beacon of light.

Of the over 100 magazine covers Kirk has had over the years, more than 1/3 of these have used one of his twilight images: "Over the years many students and competitors have asked me how my work has been selected for so many covers and the simple fact is on every shoot I specifically do a couple of potential covers, images that are visually very striking from a distance (such as on a magazine rack). The "Twilight Architectural Photography (TAP)" fit this bill perfectly as they can be visually stunning, warm and inviting, and controllable tonally through my lighting, especially when shooting residences."

To get the warm feeling that Kirk so desires, he photographs the halogen and incandescent





Kirk Gittings

lighting found in the buildings using unfiltered daylight transparency film. In addition, he will employ fill lighting to help balance the effect. "Residences are usually poorly lit on the exterior and dimly lit on the interior. I often need to add a broad fill light (usually bounced off the ceiling) to the visible interior spaces and at times to the exterior walls as well. What I am looking for is a balance of light where the interior of the house glows brightly against a cobalt sky. There is about a 5 minute window where the exterior natural light and the interior artificial light is at an optimal balance."

The techniques Kirk employs in his work have taken several years to perfect. He has found that for the interior of a residence to glow, the film must be exposed one to two stops lighter than middle gray (this will be about Zone VI to Zone VII on the Zone System). In addition, the sky must be about one zone, or stop, darker than the interior. Preparation is the key to a successful image as there is such a small window of opportunity when these lighting conditions exist. Kirk arrives on location early so he is ready as the dying light of the sky falls to a level where it is about one stop darker than the interior. Using a Pentax digital spot meter, Kirk will constantly measures the relationship of the light levels and adjusts the quality and intensity of his supplemental lighting until the proper balance is achieved, then he exposes the image. He follows the same procedure regardless if he is using traditional film or digital capture. Digital capture does allow him to both monitor and visualize the light levels using multiple exposures (that can also then be merged later in Photoshop for an



extended dynamic range). This technique allows Kirk to extend the time when the balance of light is perfect for his twilight images.

Unlike residential buildings, commercial buildings are often very well lit both internally and externally. Here the challenge is in the size of the structure, as the building's scale may make it nearly impossible to use supplemental lighting. Kirk usually ends up working with the existing lighting which means a mixture of fluorescent, incandescent and metal halide and/or sodium vapor lights. "I definitely prefer to photograph commercial buildings with color negative film or digital capture", notes Gittings, "because with either I can find a good average color balance in the scan or raw conversion later rather than having to filter transparencies on sight which I did successfully for many years but was difficult at best".

Kirk Gittings has developed a style that has placed him in the top echelons of his profession. The warm, soft and inviting glow of his twilight architectural images are in high demand amongst architects, interior designers and magazine publishers as they highlight the beauty of the structure and invite readers to explore the pages of the magazine. So, while many photographers are busy packing up for the day, heading home to a warm dinner and comfortable chair, Kirk Gittings is often just getting started. For Kirk, the last rays of light from the dying day, the edge of darkness, invites him to make images of our world at a uniquely challenging time.



Images Of Night

John Paul Jespersen

These images are part of an ongoing series titled Images Of Night. I use long exposures with the light of the moon to create these images. I discovered the surprising brightness of the moon 3 years ago while standing on a beach in Baja under the full moon. I took a shot with a 30 second exposure, and it looked like daytime. Since that night I have been on a journey trying to convey the extreme beauty that the moonlight creates.

There are a lot of aspects of night photography that inspire me to create these images, however I think that the most enjoyable aspect is the solitude that I am able to experience when creating images during the middle of the night. Some of the places I shoot like the National and State Parks can be unbelievably crowded during the day, however during the night hours they are completely empty. I am able to walk around on the geyser basins in Yellowstone NP and be completely alone under the full moon when just 6 hours earlier the same place was packed with hundreds of tourists.

There is a lot to see when the moon is full, more than most people think. I hardly ever take a flashlight. The moonlight is just bright enough to see in the darkness and hike across landscapes searching for scenes to capture. The feeling that I get as I stand there and take in a landscape lit by the moon is indescribable. The quality of light is beautiful and soft with dark mysterious shadows. The colors become bright and vibrant and the clouds and stars streak through the sky. I encourage everyone to go to a beautiful spot during a full moon, let their eyes adjust to the darkness, then take in what they see and look very closely at the amazing beauty that the moon light creates as it washes over the landscape.



**SELF PORTRAIT,
ROAD TO STANS-
BURY ISLAND**

Camera: Wista
45rf with Nikon-sw
65mm f/4

Aprox. Exp. - 8 min
@f/5.6 pushed 1 stop

Date/Time - March
2006, aprox. 2 a.m.

Location: The Great
Salt Lake, Utah

This is one of my favorite roads in Utah. It is a causeway with salt flats and the lake on both sides. This road goes to the island off in the distance. I shot one sheet with a lens swing and one without and preferred the mysteriousness of the lens swing. I triggered the camera and then walked into the scene and stood there for 8 minutes then walked back to the camera and ended the exposure. This is one of my favorite images because I think it really conveys the emotions that I feel while shooting at night under the full moon.





LAKE DUO

Camera: Wista 45rf with Nikon-w 150mm 5.6
 Aprox. Exp. 8 min each pushed 1 stop @f/5.6
 Date/Time: Oct 2006, aprox. 9-10 p.m.
 Location: The Great Salt Lake
 near Golden Spike National Monument.

This location is amazing because of the enormity of the landscape and the complete isolation, not a person within 30 miles. It is about an hour drive from Salt Lake City, then another hour on dirt roads to this spot on the shore of the lake.

When creating this image I wanted to portray the solitude I felt while being here under the full moon with out another person around for miles. The light in the distance, which looks like sunlight, is actually the light of a city reflecting off of the clouds. I chose to shoot this in two shots on 4x5 so that it could be printed extremely large to portray my message. I made about 6 frames this night of two different compositions.

I think that the most enjoyable aspect is the solitude that I am able to experience when creating images during the middle of the night



CITY CREEK CANYON

Camera: Mamiya RB67 with 80mm

Aprox. Exp. 2 min @f/5.6

Date/Time: Feb 2006, aprox. 12-1 a.m.

Location: City Creek Canyon in Salt Lake City.

I chose to make this image here because of the connection I have with this location. I grew up not far from this canyon and spent a good amount of my teen years exploring it. I was surprised at how bright it was this night. There was a lot of cloud cover and snow. Downtown Salt Lake City is just 500 yards from the mouth of this canyon, so the light of the city was reflecting off the clouds and then off of the snow making the scene extremely bright. I waited for a car to come by and then made the image.

I shot a roll of 220 this night at various locations around this spot.



FREEWAY WATER

Camera: Wista 45rf with Nikon-sw 65mm f/4

Aprox. Exp. 2 min @f/8

Date/Time: Feb 2006, aprox. 3 a.m.

Location: Salt Lake City.

I had been wanting to capture this scene for months. I loved the reflections and light as I drove by it for the first time. I finally got found the perfect conditions and went to shoot it. There was a seven-foot fence that I had to shoot over. Luckily my extra tall gitzo tripod and a stepladder made it possible to shoot over the fence. I did a lens swing to shift the focus down the center of the image making it sharp along the concrete pillars.

I exposed two sheets of this scene that night to make sure I nailed the exposure.



GLOWING HOUSE CITY CREEK CANYON

Camera: Mamiya RB67 with 80mm
 Aprox. Exp. 1 min @f/5.6
 Date/Time Feb 2006, aprox. 12-1 a.m.
 Location: City Creek Canyon in Salt Lake City.

This image was made minutes after the City Creek Canyon image. I have to say that I was a little inspired by Todd Hido when I saw this scene. I decided to make an image in homage to Hido.



MEMORY GROVE

Camera: Mamiya RB67 with 80mm
 Aprox. Exp. 1 min @f/5.6
 Date/Time: Feb 2006, aprox. 1 a.m.
 Location: Memory Grove in Salt Lake City.

The conditions for this image were very similar to the City Creek Canyon image. When I first saw this scene I was amazed at the spectacular beauty of the light. The smoke coming out of the chimney of a house becomes a ghostly wisp and the lighting from the park shifts the image into a green tone. I made multiple exposures of this scene in order to nail the desired lighting.

I constructed a 40"x50" light box print of this image because it really comes to life and pops when illuminated from behind.





MT. OLYMPUS

Camera: Mamiya RB67 with 80mm

Aprox. Exp.: 5 min @f/5.6

Date/Time: Feb 2006, aprox. 2-3 a.m.

Location: Salt Lake City, Utah

This is another image that I made because of the connection I have with the subject matter. I grew up with this amazing mountain but always just ignored its beauty. After going away to school and coming back to Salt Lake 5 years later I discovered how much I love this mountain. It is a 15-minute drive from downtown Salt Lake City to the shadow of this mountain. Its enormous granite cliffs shoot straight up above the neighborhood below. I was driving around this neighborhood on the night I made this image when I came to a street that dead-ended and gave me a great vantage point of the mountain. I made only a few frames of this composition that night.

MC

S U B M I T Y O U R W O R K T O C E N T E R F O L D !

Centerfold is a new, regular feature of MAGNAchrom that will showcase one panoramic photograph printed large, in a double-wide spread. You must be a registered user of MAGNAchrom as well as a member of www.panorama-gallery.com.

To be considered, send an email to centerfold@magnachrom.com with the information at right, and a paragraph (or two) describing the photograph, technique, and/or your artistic vision.

If chosen, you will need to supply a single image sized fit inside the following pixel box: 5250 wide x 2625 tall pixels in RGB JPG (high quality) format. Images should not have any borders.

FTP information will be supplied to those that win. If you are not chosen, please submit again for the next issue — there is no limit to the number of times you can submit. Winners however must wait one year before submitting again.

About you:

Your Name _____
Your MC email _____
Your Website _____

Describe your panorama:

Title _____
Camera _____
Film or back _____
Exposure _____
Lens _____
Year taken _____
Location _____
Link to photo _____

C E N T E R F O L D

After moving from Moscow to Dublin ten years ago I found that photography opened up a new way of seeing my adopted home. Viewing Dublin through the lens of my camera and particularly through the printed images as they appeared in the dark room, gave me an intense appreciation for the city. As I began to travel more and more to the near and remote locations of Ireland seeking new experiences and new images I came to realise this small island holds an uncommonly vast array of striking landscapes. While I'll never be able to photograph them all, on this site I've included some of my favourites that I've been lucky enough to encounter.

My photography is very straightforward. I see something beautiful and I try to capture that beauty with my camera in order to share it. Sometimes I'll see something that isn't amazing as a whole but broken down into an abstract can be stunning. I'm a very straightforward type of person as well. With each photo I simply strive to encapsulate the beauty by creating an image as technically perfect as possible so the details are vivid and make the photo come alive. I do, of course, have my own emotional connections to the images — usually surrounding the experience of finding such splendour in front of me—but the images are universal. I like knowing that a single photograph will mean something different to everyone who experiences it.



Docklands Panorama, ©2007 Philip Pankov

*You can see more of my work by visiting:
www.PhilPankov.com*

— Philip Pankov



C E N T E R F O L D



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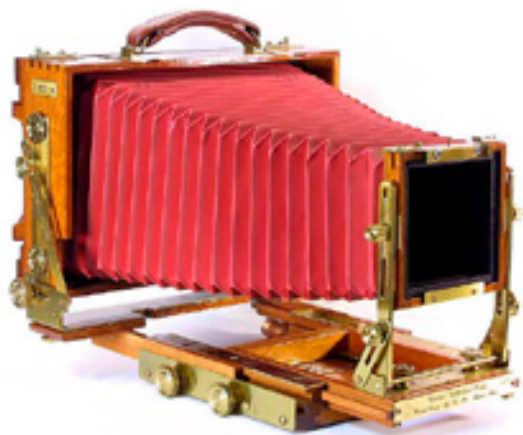


Figure 1, 4x10 cameras. Top: Fotoman 410PS; Middle: Wisner Technical Field; Bottom: Shen-Hao HZX410-IIA



Arch, Alabama Hills

Adventures in 4x10

by Brian Vuillemenot

I have always been fascinated with panoramic photography. The elongated field of view allows one to capture the essence of a scene and visually describe interactions between its component parts. This photographic approach is well suited to the wide open spaces of the American West where most of my images have been created. My first panoramic camera was a fixed lens Fuji G617 camera, creating four 6X17 cm exposures on a roll of 120 film. While I loved the results, this camera is a “one trick pony”, having a fixed 105 mm lens which does not allow for focusing closer than about three meters. Soon after, I began using a 4x5 view camera, and became aware of the benefits offered by lens movements, large film size, close up focusing, and being able to use a wide assortment of lenses. I wanted a way to combine the awesome panoramic format of the Fuji with the larger film size, wide lens selection, and the movement and focusing capabilities of my

4x5. The obvious choice was 4x10. Over the last four years, I have been experimenting with the 4x10 format in two different ways. In this article, I will describe both of these approaches, briefly review the available cameras, and discuss 4x10 tips that I have learned in the field.

Dedicated 4x10 cameras

The number of available 4x10 cameras has increased substantially over the past few years. A brief summary of the six available brands will be given. Two inexpensive and well made Chinese 4x10s, the Fotoman and the Shen-Hao, have become available recently. The Fotoman 410PS is a rangefinder type camera with an optical view finder that uses a helical focusing mount to estimate focus. Alternately, a ground glass can be used to compose. Rather than having a flexible bellows, lenses are mounted to the front of the camera using a plastic cone. A different cone must be

purchased for each lens to be used, and a wide variety is available, encompassing focal lengths from 110-300 mm. Although it lacks movements, this is the least expensive 4x10 available, at \$1100. In addition, it can be used handheld with the available aerial handles, opening up interesting new possibilities in this format. The camera and focusing cone, without a lens, weighs 4.4 lbs. The Shen-Hao HZX45-IIA 4x5 camera has acquired a great reputation as a well made inexpensive camera for new large format photographers. A 4x10 version, the HZX410-IIA, was introduced last year. This camera is made of walnut with aluminum hardware, uses lenses from 110-550 mm, and has a full range of movements. Inexpensively priced at \$1695, its one potential drawback is that it's heavier than the other 4x10s at 8.8 lbs.

The Alt View 410 WA is a non-folding camera that was made from Australian lacewood and aluminum by photographer and camera maker Patrick Alt. At four pounds, it is very light. Movements are limited to front rise and tilt, keeping the camera very rigid. Lenses from 90-300 mm may be used with this camera. The Alt View 410 WA was a very reasonable \$1895 when available, but unfortunately production ceased several years ago. It may be possible to find one on the used market, however. Wisner Classic Manufacturing makes two different 4x10 models, the Technical Field, of mahogany and brass (Figure 1), and the Expedition, of cherry and brass anodized aluminum. Both these cameras feature beautifully crafted traditional styling with a red leather bellows, and have extensive movements, including rear geared axis tilt. The Technical field has a few more inches of bellows draw (23 vs. 20.5) and costs less (\$2495 vs. \$2795) than the Expedition. Although exact weights are not given on the Wisner website, my Technical Field weighs 7.75 pounds, about 1.5 pounds heavier than the Expedition. Since the Wisner Company is in a state of change, recently moving to a new production facility, these cam-



Bisti Badlands



Figure 2. Wisner 4x10 Technical Field camera and film holder.

eras may not be available new in the future. They are available on the used market occasionally, such as Ebay, which is how I obtained mine.

The 4x10 made by K.B. Canham is another finely crafted camera made of walnut and black anodized aluminum with a synthetic cloth bellows. It has a more modern styling than the Wisner or Lotus. The Canham has an extensive range of movements and a 26" of bellows draw. The final choice in 4x10, the Lotus rapid View, is made by Lotus View Camera in Austria. This very fine quality camera is made of cherry with aluminum hardware, and weighs 6.2 pounds. It features a wide range of movements and 23" of bellows extension. Due to the current Euro- U.S. dollar exchange rate, it is an expensive option, selling for €3500. For photographers who already own a Wisner, Canham, or Lotus 4x5, conversion kits are available. Comprising a rear standard and bellows, these allow you to transform the 4x5 to a

4x10, and can be purchased less expensively than a whole 4x10 camera.

Availability of film holders is an important issue to consider before acquiring a 4x10 camera. Unfortunately, no standard size exists for 4x10 holders, and three different types are available, made by Wisner, Canham, and Lotus to fit their cameras. The Fotoman and Shen-Hao were designed to accept Canham holders, while the Alt View accepts Lotus holders. The most easily available and affordable film holders for 4x10 are produced by Canham of plastic. Fortunately, if your 4x10 camera accepts a different type of holder, Canham can modify it to accept his filmholders. An additional option is to order custom made wood 4x10 filmholders offered by two companies — S&S and AWB Enterprises.

Film Cutting

Because of the paucity of commer-

cially available 4x10 film (as of writing, only one emulsion, Berger BPF-200 is available in 4x10 format), use of a 4x10 camera will probably require cutting 8x10 film in half. While a bit tedious, it simply requires a bit of practice to get comfortable with. An inexpensive paper cutter, such as those produced by Fiskars, can be adapted to the task. In order to cut the film in half lengthwise in the dark, it is necessary to make a matboard guide that is attached to the cutter. This guide allows one to cut the film as close to exactly in half as possible. Since the short side of 8x10 film is actually 7-15/16 inches, the film needs to be cut to 3-31/32 inches. If this is off by more than 1/16 of an inch, the larger half may not fit into the holder, while the smaller one may fall out of the holder slots. Start with a piece of 4-ply matboard about 6" x 11". Glue a 2" x 11" strip of mat board along the left long edge of the 6" x 11" piece, leaving 3-15/16" projecting to the right. Tape the cardboard guide to the bed of the cutter using double sided tape so that the shoulder formed by the 2" x 11" strip is exactly 3-31/32" away from the cutting edge. Cut another matboard to 3-1/2" x 11" to use on top of the film to hold it down during cutting. The Fiskars cutter with guide that I use is shown in Figure 3.

To use the cutter, lift the blade guide up and place a sheet of 8x10 film emulsion side down in the matboard guide so that the left edge is snug against the shoulder. Place the 3-1/2" x 11" matboard strip on top of the film, seated snugly against the shoulder. Carefully cut the film with the blade, being careful not to let the emulsion scratch when the film falls. Pick up the right half of the film, which does not have a notch, turn it over, and clip a small piece off the upper right corner with scissors to identify the emulsion side. Film can be boxed for storage or immediately loaded into holders. To be certain the cutter guide works, and gain familiarity with the technique, it is recommended that this be practiced a few times with used or expired film in the light. The cutter may then be used with good



Golden Gate Bridge, North Tower, and San Francisco



Figure 3. Cutter and guide to cut 8x10 film in half.

film in a darkroom or film tent.

The "Half Darkslide" Approach on 8x10

For photographers with an 8x10 camera system, an alternate approach exists. An 8x10 darkslide can be cut in half so that one half of a sheet of film may be exposed at a time. The darkslide is then removed, turned upside down, and reinserted to enable the exposure of the remaining 4" x 10" area of the film. When trimming the darkslide, it is important to cut out an area slightly less than half (approximately 4") so as to leave a bit of space between the two images. This will result in an image size of approximately 3-7/8" x 9-3/4". In addition, be sure to leave about 1 1/2" or so of the plastic intact on the short end of the darkslide underneath the handle. That way, when the half darkslide is inserted, it will be properly seated in the holder and the light baffle will be covered. The half darkslide has an "L" shape to it (Figure 4).

The half darkslide is prepared by first drawing a line in pencil 4" from the bottom of the long edge. Next, draw a perpendicular line 1-1/2" underneath the handle on the side that will be cut away. Trim along the lines using sharp scissors or a razor. If the plastic splinters, smooth it out with some fine sandpaper. After testing the half darkslide, it can be trimmed further to reduce the space between the two exposures if desired. Generally speaking, a 1/4" space is preferable.

To use the darkslide, compose an image on one half of the ground glass in an 8x10 camera. Optionally, a 4" x 10" cardboard mask can be used to cover the other side of the ground glass to simplify composition and focusing. After focusing, making movements, determining exposure, stopping down the lens, and cocking the shutter, insert a loaded 8x10 holder. Remove the full darkslide and insert the half darkslide to cover the area opposite your image.



Make the exposure, remove the half darkslide, and then reinsert the full darkslide. To expose the other half of the film, compose an image on the opposite side of the ground glass and repeat the process, but insert the half darkslide upside down in relation to the first time to shield the already exposed image. Keeping track of which side of the film has been exposed is very important, and can be tricky in the field. The system I use is to attach a small red circular sticker on the film holder to identify which sections of the film have been exposed (Figure 4).

Using the half darkslide approach is advantageous for photographers who already own an 8x10 system, and gets around the complications of cutting down film and finding 4x10 holders. In addition, you can shoot multiple formats. I often use my 8x10 to shoot 4x10, 4x5 with a reducing back, and 8x10 simultaneously. On the downside, an 8x10 camera is much heavier and bulkier than a dedicated 4x10, important for backpacking photographers, and will not allow for the use of wider lenses (shorter than 150mm) without a bag bellows. In addition, use of a dedicated 4x10 enables one to get more into the “panoramic mind-set”, often simplifying composition.

Stitching

A third possibility for creating 4x10s is to make two aligned 4x5 exposures, scan them into digital files, and then stitch them together using one of the available image stitching programs. Cameras with extensive rear shift allow one to make two exposures that are perfectly aligned. A 4x5 exposure is made with the back shifted to the left, and then the back is shifted to the right so that the left edge of the second exposure lines up with the right edge of the first. This requires a lens with enough image circle to cover both exposures. Alternately, the camera can simply be panned to the right between shots, although the perspective will be slightly altered between exposures. Many ac-



Big Sur Coast, Julia Pfeiffer Burns State Park



Figure 4. Half darkslide to expose two 4x10 exposures on a sheet of 8x10 film. 8x10 film holder with red circular stickers to keep track of which sections of the film have been exposed.

cessories exist to assist photographers who choose to create panoramas in this fashion; a description of them is beyond the scope of this article. While stitching may not be as satisfying in that a 4x10 film is not produced, it is an inexpensive alternative for 4x5 shooters who use a digital workflow.

Lenses for 4x10

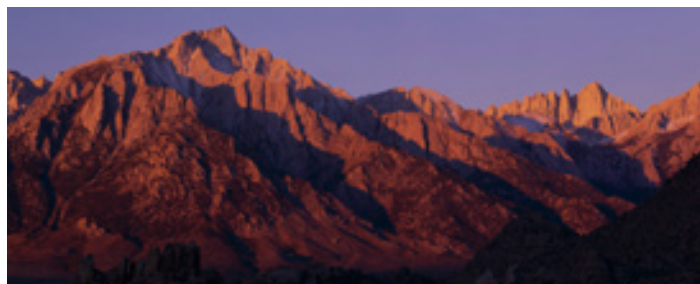
There are numerous possibilities in lenses for the 4x10 format. With an image diagonal of 267 mm, many lenses which will not quite cover 8x10 have ample coverage for 4x10, including movements. With the 4x10 format, lenses of a given focal length will feel more like they do in 8x10 than in 4x5. For example, a 150 mm lens, normal for 4x5, but wide for 8x10, feels wide on 4x10. Your favorite lens selections for 4x5 and/or 8x10 will likely translate into preferences on 4x10. Since I often use a 150 as a normal lens when shooting 4x5, the 300 became my normal lens for use on 4x10. On the wide end,

I tried a Super Symmar XL 110, but found it to be too wide for my tastes, and there was objectionable light fall off in the corners due to my lack of a center filter. I settled on a Caltar-II-N 210, which I find wide enough for most applications. Although the Caltar won't quite cover 8x10, it is more than ample for 4x10, and was very inexpensive on eBay. The Fujinon-C 450 rounds out my current lens selection, and is my most commonly used lens in the 4x10 format. I like the way that this lens can simplify a scene by extracting smaller “slices” of the landscape, and bringing far off subjects closer. Because of the limited depth of field of the 450 C, I generally use this lens to photograph far off subjects focused at infinity.

4x10 Technique

4x10, and panoramic formats in general, allow the photographer to interpret subjects in new and different ways. They





Pigeon Point Lighthouse

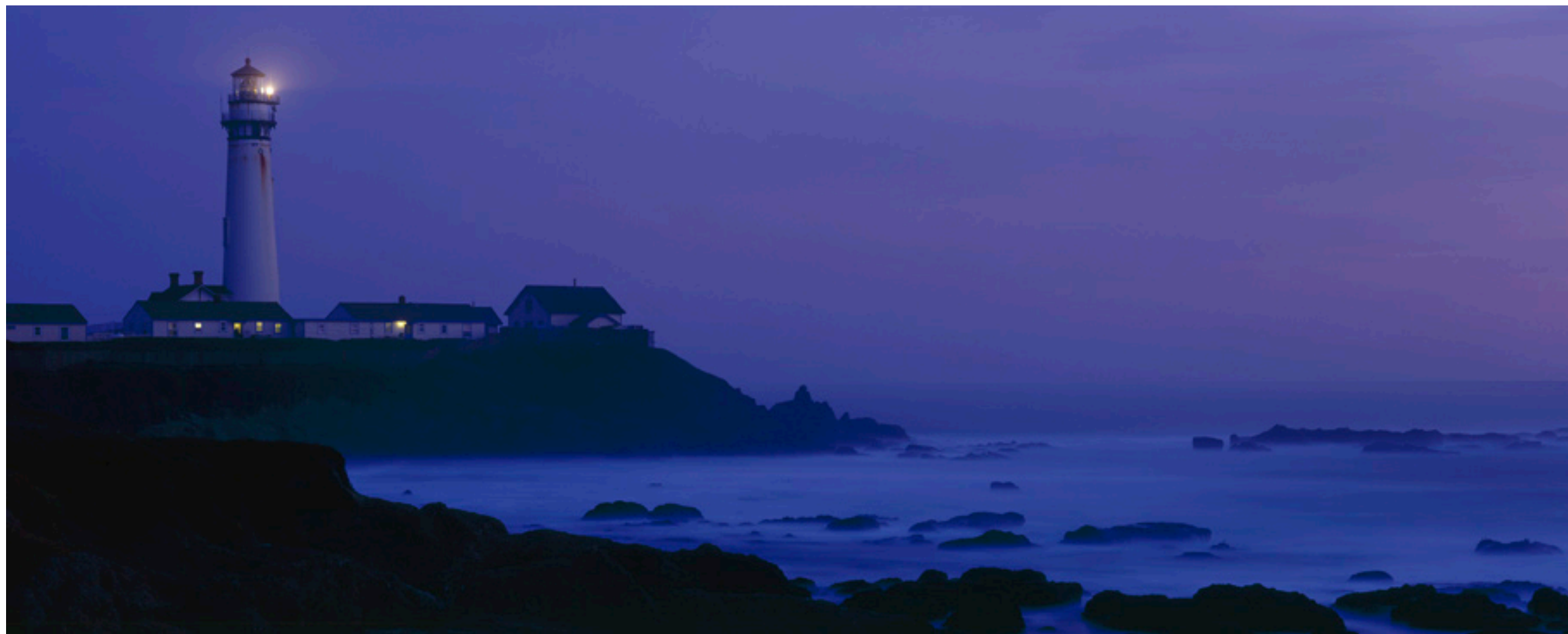
“The number of available 4x10 cameras has increased substantially over the past few years”

can be used to photograph expansive landscapes for mural sized prints, ultimately giving the print viewer an experience similar to actually being there. As such, panoramic composition is often more of a matter of recording the interactions between component parts rather than any single subject. Another idea is to photograph a horizontal slice through a subject, rather than to try to photograph it in its entirety, as would be done with a standard format. Since the main compositional element often lies along the middle third of the long film axis, near-far type perspective, often used with wide angles in standard formats, will not work as effectively on 4x10. Although most panoramic photographs are produced in a horizontal orientation, photographing vertically in the 4x10 format can be very effective for certain subjects, such as trees and tall buildings. A little bit of creativity goes a long way when interpreting your favorite subjects innovatively using the 4x10 format.

Conclusions

4x10 is an under appreciated format with a great amount of potential. 4x10 chromes and negatives can yield stunningly detailed prints through digital or traditional enlarging. Contact prints from 4x10 are a great size for intimate viewing. The size of a dedicated 4x10 camera is not much larger than a 4x5, so is a good choice for those interested in a banquet format who don't want to struggle with a 7x17 or 8x20 camera. In addition, 8x10 shooters already have all the necessary equipment and know-how to photograph in the 4x10 format. A lot of photographic potential remains to be discovered in 4x10, and I hope that this article will make you consider beginning your own explorations with this wonderful format.

If you have any questions about this article, feel free to contact me at cleowolfe@yahoo.com. You can check out more of my work on my website at www.imagesofenchantment.com



Do-it yourself vacuum film holder

by Danny Spence

My goal in this project was to create a 4x5 vacuum film holder for astrophotography; however, this film holder could also be used for very exacting photography and even scaled up for ultra large formats (8x10) as well. After researching the internet for these holders I have found them to be rare if not non-existent, so the purpose of this page is to show how to build one from easily obtainable existing parts. Please be warned: I am not an expert by any means. There are likely better tools for the job.

Background

Not long after I purchased a 4x5 view camera, I tried training its lens upwards towards the night sky; I had envisioned photographing marvelous constellations of hundreds of stars on a massive chunk of 4x5 film. After several weeks of trial and error, I ran into one unforeseen obstacle: stars were recording as fat, out-of-focus blobs instead of points of light on the processed film. During many minutes of exposure in cool night air, I learned that the film was absorbing moisture and bulging slightly out of the film holder. This outward bulge was altering the focus of the image on the center of the film, yet on the periphery it was still sharp as the holder kept the edges of the film flat. I didn't have this problem with my 35mm and medium format cameras; it seemed the large surface area of 4x5 film was too much of a good thing. In seeking a solution, I remembered from browsing photography forums over the years that specially made vacuum film holders existed that kept film perfectly flat. These special holders aren't normally required for photography because regular film holders do a fine job

for brief exposures. However, I was exposing film for many, many minutes, and a regular film holder couldn't keep the film flat for the time I needed.

I've searched the internet for a commercially made vacuum film holder — with the exception of two impossibly priced systems (well over \$2,500!) I couldn't find anything. Then I ran across a PDF file by a fellow named Suk Lee, who, like me, was using a 4x5 view camera to photograph the night sky. In his article, Suk had a common film holder that had been modified into a vacuum back by drilling holes through the holder and incorporating a vacuum plate on the reverse side. A small tube connected the plate to a battery powered aquarium air pump which had also been modified to create a low vacuum instead of pressure. It was such a simple solution I was surprised it was so difficult to find. The downside of the design was that the tube for the vacuum erupted right out of the middle of the film holder. This required the ground glass and/or the entire back frame of the camera be removed to accommodate the tubing. Further, with no back on the rear of the camera, the film holder had to be held in place with a block of wood and rubber bands. This was far from preferable, but I liked the simplicity of the modified holder. With the potential of its design in mind, I decided to make my own vacuum film holder — however, I wanted it to be able to slide in and out of the camera exactly as a normal holder would. I didn't want to remove the ground glass, nor remove the camera back — I wanted the entire system to fit within the spaces of the film holder with no protruding parts.



A Low Pressure System

The first thing I decided to tackle was the vacuum. I spent some time looking on the internet for a small battery powered vacuum motor designed for low volume, and again, nothing was commercially available that I could find (or perhaps I just never hit the right combination of search terms). I figured I might as well try to modify an aquarium air pump by trial and error. I located a small battery powered air pump at a local PetsMart, and then took it apart to see what made it tick. It was surprisingly simple: a plastic assembly molded to hold a electric motor and a bulb-like rubber bellows, and beneath the bellows a hard plastic port for the air tubing. The shaft of the motor bent slightly at an angle where it attached to the rubber bellows, and it worked like a cam by compressing and expanding the bellows at high speed. The bellows had two holes on the bottom, each with a one way valve. When the bellows stretch by the upward motion of the cam, air is pulled in. When the bellows compress, the valve letting air in closes, and air flows out the other one way valve. When I removed the bellows unit by backing out a screw holding it in place, I discovered that the design of the bottom of the bellows was symmetrical: the valves were evenly spaced from the center, so if the bellows unit were rotated 180 degrees, the pressure and suction valves would be reversed. It was almost as if someone designed the bellows to be interchangeable. The bellows unit has a protruding notch that only allows it to fit on the assembly one way, so using a Dremel tool I cut a second opening for the notch on the molding to reverse the bellows from their normal position. I then reattached the bellows unit and reinstalled the entire as-

sembly. When I switched it on, I noticed there was a very slight suction on the port for the air tubing. Perfect!

Drilling Holes

With the vacuum working, I next started work on the film holder. After modification, one side of the film holder houses the vacuum, and the other contains the film, so a two sheet film holder will only hold one sheet of film. The easy part would be drilling holes through the holder, so I began with the design for the spacing of the holes. On a sheet of paper cut exactly to fit inside the holder where the film would be, I found the center point and drew a one inch radius. I kept the design symmetrical, with each point for a hole in the film platen evenly spaced. I repeated the process until I had a star-like cluster of eight points to drill. Next I copied the sheet on a copy machine, as I would be reusing the pattern for later use. With a hand-held drill, I used the smallest drill bit I had (1/16") and drilled through the copy of the paper template and into the film holder platen. Note: the platen is made (as best I can tell) of aluminum. I immediately noticed that the edges of each hole were a bit rough after drilling. These edges could potentially gouge the back of a sheet of film as it slides in and out of the holder, so I inserted the next largest bit into the drill and very gently ran it inside the perimeter of each drilled hole. This smoothed out the burs and left the surface of the holder smooth once more.

More Defilement

With the pattern of vacuum holes in place, I turned to how to get a suction tube within the film holder. I wanted the vacuum back to func-

tion just like a normal film holder, so I decided to run the tubing for the vacuum right through the unused light trap. This way, the tubing wouldn't foul the ground glass or camera back in any manner. I chose the smallest material I could find — a 3/16" diameter tube from the same PetsMart where I purchased the air pump. Set inside where the film would be, the thin tubing fit flush with the topmost edge of the film holder, indicating I would have to cut away some of the holder to make a path for the tubing to fit. With a Dremel tool, I began to mill out the plastic housing on the inside edge of the film chamber and slowly worked out to the dark slide pull. Some care should be used once the fabric light trap is reached — it will easily shred and bind on contact with the cutting bit. I varied the height of the bit, shaved plastic from the outside down to the fabric below, and cut away the light trap fabric with scissors where needed. Noteworthy is a small metal bar at the top edge of the light trap; I bent it out of the way against the bottom of the holder with a flathead screwdriver. When I reached the edge of the film holder, I took advantage of a slight thickening of the material and cut a tunnel of sorts for the remainder of the path for the vacuum tube.

Squaring Things Away

Now with the tubing set, all that was left was the means of connecting the holes in the platen of the film holder to the vacuum tube. I wanted to use some kind of thin plate with a port on the side for the vacuum tube and a hollowed



out cavity on the bottom linking all the holes in the platen. Listed on the website of U.S. Plastic Corporation were sheets of thin 3/16" Delrin plastic; a sheet of 12" x 12" is available in white or black. I opted for black to aid in blocking light from passing through and fogging the film. As the holes in the film holder platen were two inches apart, I chose to make the plate three inches square. Using a jigsaw with a fine toothed blade, I cut out several squares from the Delrin plastic sheet, and then ran the edges along a belt sander. The sander was used to create a streaked pattern to match the texture of the film holder platen. With a square clamped securely into my workbench (thin edge facing out) I carefully drilled a pilot hole with a hand-held drill where the vacuum tube would meet the edge of the square. The drill should be as parallel with the edge as possible, as it can be very easy for the bit to be off and go through the top or bottom of the sheet and ruin it. Once completed, I needed a coupler to join the vacuum tube and square together. I figured some kind of rigid hollow tube would work for this task, so I made one by grinding down a plastic tubing size adapter that came with the aquarium tubing on the belt sander.

All that remained was to cut out a cavity in the plastic square. Using a paper copy of my earlier drilling pattern, I centered the pattern on the plastic square and taped it in place. I cut through the paper guide using the Dremel tool; following the pattern on the paper I created a donut-shaped circular path in the middle of the square, and left a wide margin for error where each hole in the platen should align. Once complete, everything stood ready for assembly. I thoroughly cleaned the film holder and plastic

square of any plastic shavings, and then used isopropyl alcohol to further remove any surface grime. Using another paper copy of the hole drilling pattern design, I cut a three inch square out of the center to create a hollow mask. This was slid into the film slot of the holder, and would be used to quickly and easily align the square with the exact center of the film holder platen. To bond the plastic square to the film holder platen, I decided to use spray adhesive. Using scotch tape (as it has a no-mess, low tack adhesive), I masked off the milled-out channel in the square and a 1/16" border around the the edge where I did not want glue to adhere to. I then trimmed away any excess tape with an x-acto knife (razor blade). Next, I sprayed on the adhesive and removed the protective masking tape. Using the paper centering guide, the square was then placed on the film holder platen and clamped in place for 24 hours to let the adhesive fully cure. Once sufficient time passed, I removed the clamp, checked the bond and installed the vacuum tube. I originally considered putting some silicone sealant around the edge of the square; however, as it turned out the spray adhesive made a very nice air-tight seal around the perimeter and the silicone wasn't needed.

So Does it Work?

With a scrap piece of sheet film inserted into the holder and the pump switched on, the film was immediately and dramatically pulled in with enough force that the holes in the platen were plainly visible. Success! But perhaps too much so; I was now concerned that the vacuum was warping the surface of the film. As the film holder also now sported several new holes, I wanted to check for light leaks through the

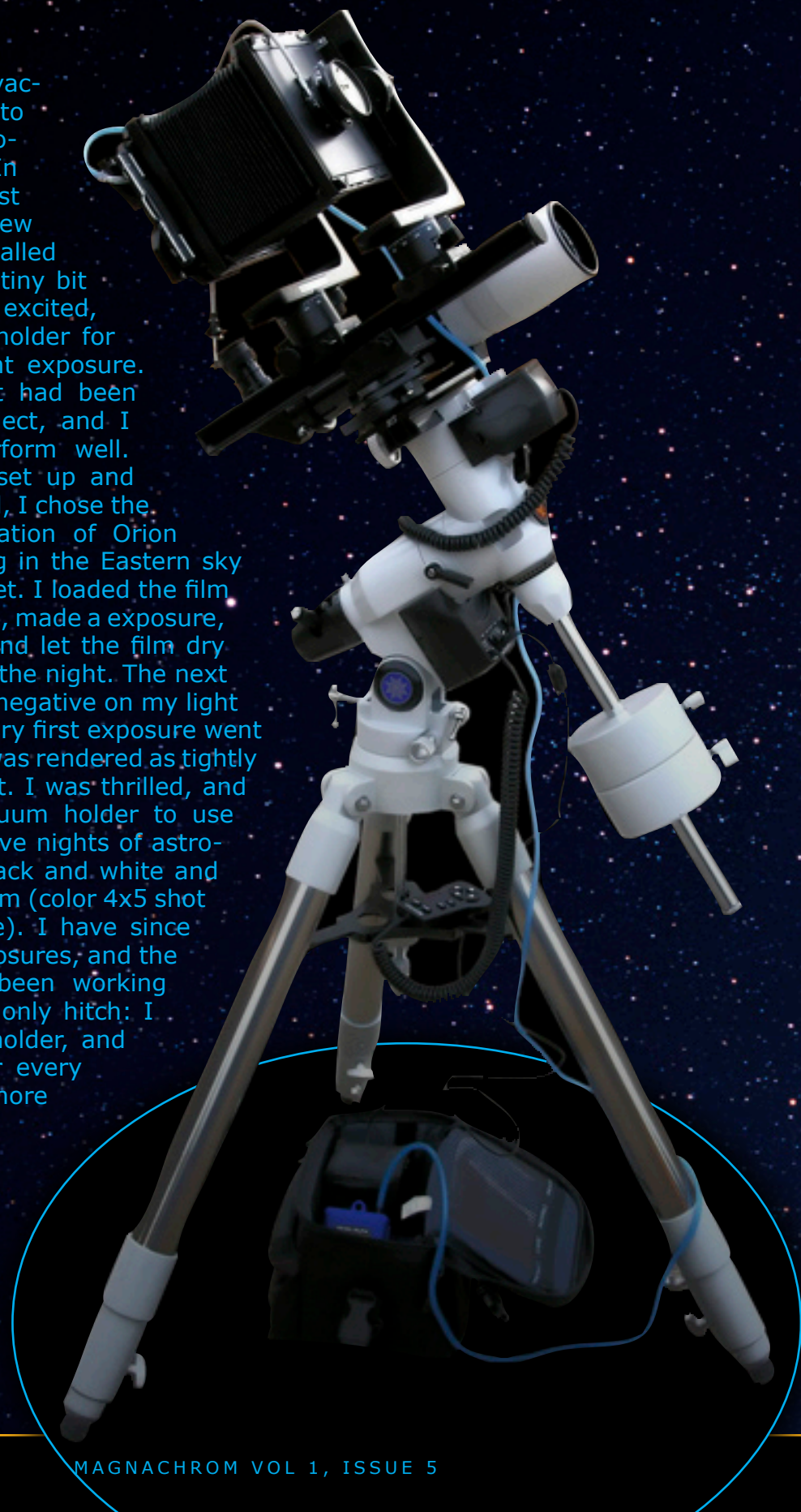
vacuum assembly. I took my tripod mounted 4x5 camera outdoors, and chose a location next to a wall with full open shade (that is, no direct light from the sun, but indirect light from the clear sky). I then taped to the wall a finely spaced grid pattern from a photographic copy stand as a target. The camera was centered and made precisely parallel to the grid target with a laser-based alignment tool (the very nice Versalab Parallel). The modified film holder was then loaded with Kodak TMax 100 black and white film and a exposure made with the lens at its maximum aperture (f/5.6) to minimize the depth-of-field at the film. I then removed the film holder, moved into bright sunlight, and rotated and tilted the film holder — with particular attention to the vacuum plate — in the sun to expose the film to any light leaks in the holder. The holder was unloaded, the sheet of film labeled (vacuum on, off) and processed. Upon examining the negatives, I could see no indication of the vacuum warping the grid pattern, and no light leaks were found.

For an sample shot taken with the setup described in this article, please see the next spread.



First Light

The final test of the vacuum film holder was to take it out and photograph the stars. In astronomy, the first time you take out new equipment, it's called "first light". I was a tiny bit nervous, but very excited, to use the vacuum holder for its first long starlight exposure. A good bit of effort had been placed into the project, and I hoped it would perform well. With my telescope set up and 4x5 camera mounted, I chose the magnificent constellation of Orion which was just rising in the Eastern sky as my first light target. I loaded the film holder with TMax 100, made a exposure, processed the film and let the film dry for the remainder of the night. The next day, I examined the negative on my light box and found the very first exposure went perfectly! Each star was rendered as tightly focused point of light. I was thrilled, and quickly put the vacuum holder to use for several consecutive nights of astrophotography with black and white and color transparency film (color 4x5 shot of Orion shown here). I have since made numerous exposures, and the entire system has been working extremely well. The only hitch: I only have the one holder, and have to reload after every shot. Now I need more vacuum backs...!



MC

DANNY SPENCE: ORION BELT & NEBULA

EIRIK BERGER: LONGYEARBYEN

The main reason I came to Longyearbyen is that I want to photograph the remains of “Pyramiden” an abandoned Russian mine-town 110 km away from here. The Russians operated a coal mine from the early 1930s up to 1998 when they closed the town. Everything is left behind. Books in the library, bedsheets, toothbrushes. It looks like the people just vanished. The 9 years that have passed has made the town falling more and more apart. I have a good cooperation with the Russian mine-company and the governor on Svalbard so that I will be granted access to all buildings that are normally locked. I have been on 4 trips to Pyramiden already and I am mainly using 4x5 for interiors/exteriors and medium format 6x9 and 6x4,5 for detail shots.

This is an image of the town Longyearbyen which is the biggest settlement on Svalbard with 2000 people. It is Norwegian but it is inhabited of people from all around the world. The mountain in the background is called “Hiorthfjellet”, and the building in the foreground is “Huset” (The house) which contains restaurant, cinema, night club etc. It is the place where people meet.

Location: Longyearbyen, Svalbard Norway
Camera: Toyo 45CF
Lens: Nikkor W 210mm f5,6
Film: Fuji Velvia 100F
Format: 4x5
Exposure: 12 sec @ f16
Date: 2006.11.26 at approx 16.00 (4pm)



INTERVIEW Tom Paiva

Tom Paiva is one of the most prolific night photographers in the world. This interview took place over the course of a phone call in the late spring of 2007. Tom is a most animated interviewee — full of quick jokes and insightful observations, as you will find out by reading this most enjoyable interview.

Tom's work can be seen at: www.tompaiva.com



View 1-040217

MAGNACHROM How can you explain the recent — relatively recent anyway — craze for night photography? It seems that everybody's doing it.

Tom Paiva It does seem that it's become extremely popular. I noticed that it's in the media and in the press, especially in the last year or so. It's a new discovery for many. Personally, I like the nighttime and I've always been enamored with it. So for me, it's not a big surprise.

MC When did you first take your very first night photographs?

TP When I was just a teenager. I got my first 35mm range finder camera — a Leica knock off — I was about 15 and took pictures of almost everything as everybody did at the time. Exploring yourself

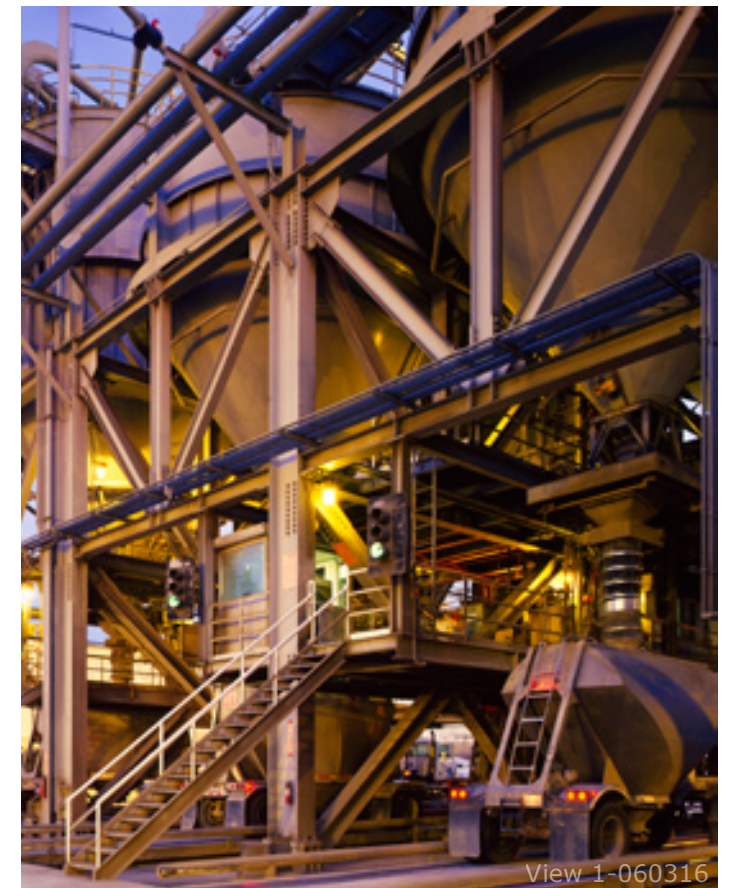
kind of thing. I decided to take some pictures of the neighborhood at night but I just didn't know what I was doing. I started with one-second exposures which was the longest shutter speed the camera had, but it wasn't enough. Someone told me about "bulb" and I started to play around with that. I tried several second exposures and even minute exposures and all of a sudden I got airplanes streaks taking off at the local airport in the background, I couldn't figure out what they were first... obviously that goes back a long time ago. I started doing my serious photography in the mid-eighties at the Academy of Art in San Francisco.

MC None of this was commercial work at that time? This was just for your own fulfillment?

TP Not commercial at all. Definitely for my own fulfillment. I was figuring out where I wanted to go and I think that's one of the toughest things for young photographers. I'm working with an intern right now who is assisting me and he's fascinated with the night stuff I do but I don't think it's what he wants to do. He wants to try to find his niche and I said "you're twenty-six years old, it takes years to find your niche and your direction". As for me, I decided that I liked the man-made environment and shooting at night. I find it peaceful and contemplative and that's one of the reasons why I do it, but it took me years to find that niche. Night photography is sort of like working with a blank canvas, as all the light is added, usually by man-made lights.

MC You must have originally shot in black and white, is that true?

TP Yes, I shot in black and white. I started processing my own film in my teens. I got a cheesy little how-to book on it and bought a few basic things, and started processing 35mm roll film. After a while I started making prints through a



View 1-060316

local darkroom. You joined for a small price. You bought your paper and negatives and then they included all the chemistry and such. I did that for years because I was living in little apartments or shared with two or three roommates and there was never any room for a darkroom.

MC So it must have been quite a surprise when you put color film in for the first time.

TP Yes, It was about 1970/71. I still have some of those images. I moved to San Francisco in the sixties. One of those early photos is at night in the fog in San Francisco of the Transamerica Pyramid under construction. I date that from about 1971. It was shot with Kodachrome with those nasty green night skies. But at least I was able to get exposures with it, not really knowing what I was doing. I did pictures in New York at night, too. I did a shot

out the window of my grandma's place in Brooklyn with the snow coming down, a long exposure with a single car going down the street with lights on. That always fascinated me and it definitely has a mood to it with a single street lamp. You can probably imagine what that image looks like.

MC Probably tungsten back then. If we were to look back on your portfolio we would see the technology of city lighting change over time, wouldn't we?

TP Yes. That's very true. In fact I know of just three city street lights here in Los Angeles that are still tungsten. They're very rare nowadays on city streets worldwide. I was at a cocktail party about a year ago, and the conversation went to night photography. One of the guys turns out to be a lighting designer for the City Planner's Office for the City of LA. So I told him I knew about this one light that's tungsten. We're having this intense discussion and by that point everybody's leaving our conversation because it was so boring for most people. I told him the street corner. He said,

"if you go down another mile, there's another one, and then there's a third over in the East LA". They call them 'acorn lamps' which are rare today. They are hung by a criss-cross wire that goes across the center of a busy intersection. They were at every major intersection at one time. Those light fixture-shave no adaptors for sodium or halogen lamps.

MC Those must date from the sixties or the fifties?

TP He told me they're from the sixties. I've actually shot under them. They definitely are tungsten lights. And it does have a different look but

nobody seems to notice.

MC When you're walking around at night, is your eye trained so that you can immediately say, "oh that's sodium and this is that" or do you need equipment



to tell you what the color temperature is?

TP No, my eye tells me what's going on. I have a color meter, but it rarely works with high-discharge lamps. I sent you a few images that are with sodium vapor as well as mercury vapor lights. There's the weird green spike that you can't really filter out, but you can get much of it out with magenta filters.

MC So you learned to embrace your color friend, huh?

TP Yes. I remember Steve Harper at the Acad-

emy of Art back in the eighties and he would rag on about color balancing and how difficult it had become with the new lamps and he hated them all. Mostly because he was used to tungsten film and shot under tungsten light at night and everything was white. Of course, we don't have mercury vapor or sodium vapor balanced film. So for those we have to filter, either in the field or in the darkroom or Photoshop.

MC I look at your pictures and it seems to me that you celebrate color. You don't hide it.

TP No, not at all. However, some of these views were also shot in black and white.

MC When you shoot black and white, you'll stick another sheet of film and just tag on a second exposure using the same focus and everything, right?

TP Right. It's the way I work when I shoot at night. I always keep a box of Fuji Acros film in the camera case just in case I do want to shoot black and white. Sometimes I'll go weeks without using any of it. At other times I'll shoot three, four or five sheets in one night, if I think it's really a monochrome or graphic image. I'm not really known for my black and white work so I don't really play it up. I don't process it anymore. I recently got rid of all my black and white darkroom equipment, I gave it all to a friend of mine who still shoots 4x5 and 8x10 black and white.

MC When you have your film processed, do they also scan it for you or do you do your own scanning?

TP I do my own scanning unless I need to go very high resolution. I have an Epson 4990 and I find that with 4x5 I can get a decent 20x24 print. Beyond that it starts getting a little soft. So if I'm going larger, I'll have it scanned at one of two labs that I work with who use an Imacon or drum scanner.

MC Do you find that the Epson can keep up with the dark areas or does it tend to have a little problem down there when it gets shadowy?

TP For some reason, the Epson doesn't do as

well with black and white. I don't know why. I'm not an expert on this, but in general I find that with transparencies it does a great job. A color negative also seems to show some extra grain.



MC Well maybe it's because the noise tends to be in the dark areas and with a negative, dark areas represent the highlights, which are more readily visible to the eye.

TP That's a possibility. Even in a creamy sky, like a twilight sky, which is basically close to a Zone V, there is still a little noise in the negative. I've got a continuous smooth tone and that's where the noise seems to be. That and the highlights. In the shadows, I make sure the shadows are black, so you don't have a full scale when I scan black and white. I've had things printed up in magazines with black and white images that I've scanned, and they look just fine.

MC These days a lot of the high-end digital cameras are capable of doing some very

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long exposures. Have you tried them?

TP I currently have two digital cameras, a Canon 5D and 20D. I didn't want to spend the big dollars for a fancier camera. I feel it's a poor investment unless you're shooting a lot of commercial work or have very deep pockets, which I don't. The 'noise' is there, but not objectionable unless you go large. My personal work is all large format film and the digital cameras are for commercial work. I've just heard that Pentax will be coming out with a medium format camera for their 645 series. I have Pentax 645NII gear with a wide variety of lenses: 33mm to 300mm. Their optics are right up there in my book. So it kind of excites me, the idea of them coming out with a camera with a large sensor to match those lenses. Because I have too much money invested in those lenses to sell them on eBay for next to nothing.

MC Aren't you lucky you didn't dump them like everybody else seems to have!

TP Right. I dumped a lot of things in the last few years. I have kept the auto-focus 645 gear, but

it is very sad, Michael, but I have not shot with them in over a year. The only thing I shoot film with anymore is the 4x5 or 8x10. Two major clients of mine that I was shooting tons of film for all of a sudden a year ago said they only wanted digital.

MC This was 220 or 120 film?

TP I used both. I shot 220 mainly for aerial. But now the thing is digital, that's what everybody wants. It's fast and for commercial work, it's fine. I'm not the kind of guy who says "oh the quality is terrible and film is fabulous." No, you shoot

whatever's appropriate. For a lot of things, most things nowadays, digital is good. Especially anything that goes to press. I'm on my fourth generation digital camera. And even the early generation



cameras, with only five megapixels at ISO 1600, a full-page magazine spread looked great.

MC I'm not surprised.

TP I was actually really nervous when they said we want to run this image for the cover. It's a low light and hand held shot. I shot a half a dozen of those and I gave them the sharpest one yet it looked just great in the magazine. Here we are worried about shooting RAW files and fixing this and that, and I didn't need it. For many publications, it doesn't seem to be necessary.

MC When you print your 4x5's and your 8x10's, are you printing mainly from the scanned output onto inkjet?

TP I like the Fuji Crystal Archive prints. I know it is hard to believe, but I don't have a color printer. I've been dealing with the same color printer in LA for about fifteen years. Unfortunately they tripled his rent and he was really struggling anyway. He had been in business for twenty-one years and he shut the doors just a few months ago. It really saddened me. I did a 4x5 portrait of the owner and his wife in his photolab before they tore it all apart. It's all gone now, the end of an era. Rents have skyrocketed here in Southern California.

MC Ouch.

TP Lately I haven't had the need to make prints commercially. I haven't found a person to replace him with because clients don't want prints anymore. For example, for building contractors I primarily shoot 4x5. I would scan or get it scanned and have a digital print which went into a book that they have on file in the office. But they don't even want that anymore.

MC The rumor is that your brother has moved all digital?

TP Yes he has. My brother, Troy, was so anti-digital just a few years ago. He laughed at me when I got my first digital camera half a dozen years ago, and now here he is and I had just gotten a whole bunch of slightly outdated film for him. He used to like Kodak's 160T tungsten film in 35mm.

MC Unfortunately, Kodak stopped making that, that's for sure.

TP I just finished a semester of teaching color photography at a local junior college and we were doing color printing the old fashion way, using a Kreonite machine and color negatives. Half the students in the class had never shot film before!

MC Welcome to the new world order!

TP It was a big thing for them to learn what an f-stop was. Photography majors in junior college — some second semester and they've never shot

film. That was a shocker for me.

MC How is it possible that a junior can declare a major in photography yet not understand what an f-stop is? Is all the emphasis on composition and



meaning and not about technique or technology?

TP Very much so. A lot of the students only do the minimum to get by and they have these fancy point-and-shoots. The first thing I asked of the students was to take all the cameras off P, Programmed mode. Some of them didn't like that. I said you're going to understand what's happening from now on. Several of the students really responded to it and they appreciated the extra effort. Perhaps we have to start from ground zero again. I was teaching them more than just color, but basics. I showed them a lot of images in order to try to get them to understand how things were done in the nineteenth century and even the first quarter of the 20th century — when things were pretty primitive. I brought in some of my

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old cameras such as my Speed Graphic Press camera and my Graflex 4x5 SLR. You need to know those cameras exist and how they work.

MC [Fabulous for handheld photography.](#)

TP Yeah, they're great. I do lots of portraits with the Graflex SLR. You want to be able to move around and not have to be encumbered by a tripod. I brought it from a celebrity shooter in Hollywood.

MC [Peter Gowland use to make a lot of those kinds of cameras.](#)

TP Do you know of his twin lens 4x5? I've never seen one but I've seen pictures—what a monster. It was huge. My 4x5 RB Super D which is the top camera that Graflex made. The lenses have bubbles in them but they work great. Can you imagine selling a new lens today with bubbles in it? Who would buy it?

MC [What do you do when you're on vacation? Do you avoid photography or do you actually go on vacation to take photographs?](#)

TP I take a camera whenever I travel. I went to Seattle on business recently and stayed a little longer. I took maybe twenty shots. I visited a friend of mine on the weekend. You're going to laugh but I took pictures with my cell phone! They're kind of fun.

MC [When you travel that light, do you avoid bringing a tripod or do you always bring a tripod?](#)

TP I always bring a tripod, even if it just a table-top tripod. Some of my students were saying they can't afford a tripod. I said, boloney! I brought three little tripods into class, the cheapest of which I bought for two bucks. The most expen-

sive table top tripod I had was thirty five dollars which is a really nice one with a ball head. I've actually mounted a 4x5 on that believe it or not. I told them, "don't tell me you can't afford one".



MC [You can always place it on a car in a parking lot at night if you want.](#)

TP Yeah, I also told them get a beanbag. A little pillow or similar.

MC [Do you really enjoy teaching? Is this a kind of thing that's turned you on?](#)

TP Yes, I enjoyed teaching. It makes you look at yourself. I find though, that you are working hard for the top 20% of the students. So you have to really want to do it. I realize now that teaching is really underappreciated in this country. You

have to spend so much time outside of the class time preparing.

MC [So whose photography turns you on these days? Besides your own of course!](#)

TP Thank you. I like the work of Ed Burtynsky. He does a lot of 4x5 and 8x10 — a lot of industrial work. He just did a book on industrial China which is wonderful.

MC [How would you compare his work to Robert Polidori's?](#)

TP It's similar in style to Polidori's. I think Burtynsky's work is tighter. Polidori is more "off the cuff". I like his work a lot, too. Polidori's book on hurricane Katrina and New Orleans is inspirational. I was in New Orleans about six months after Katrina and it was a tough place to wander around. I took a panoramic camera with me that trip and that's all I shot. A Horizon, a little 35 mm.

MC [Did you ever do anything with those negatives?](#)

TP No I didn't. I wandered around some nasty areas where there were cars on top of houses — a lot of strange things. It's similar to what I did two weeks after 9/11 in New York City. There I used my press pass which got me into Ground Zero at night. I took shots in there and used my little table top tripod. You could see flames licking up and the eerie glow that we have all come to recognize.

MC [Were these night shots?](#)

TP Yes.

MC [What about New Orleans?](#)

TP New Orleans I did daytime. I also did some twilight stuff. I was there for other reasons, not specifically to shoot. It was a holiday for me and I visited friends. It's tough when you're traveling with non-night-photographers to do night photography. I won't subject people to that anymore.

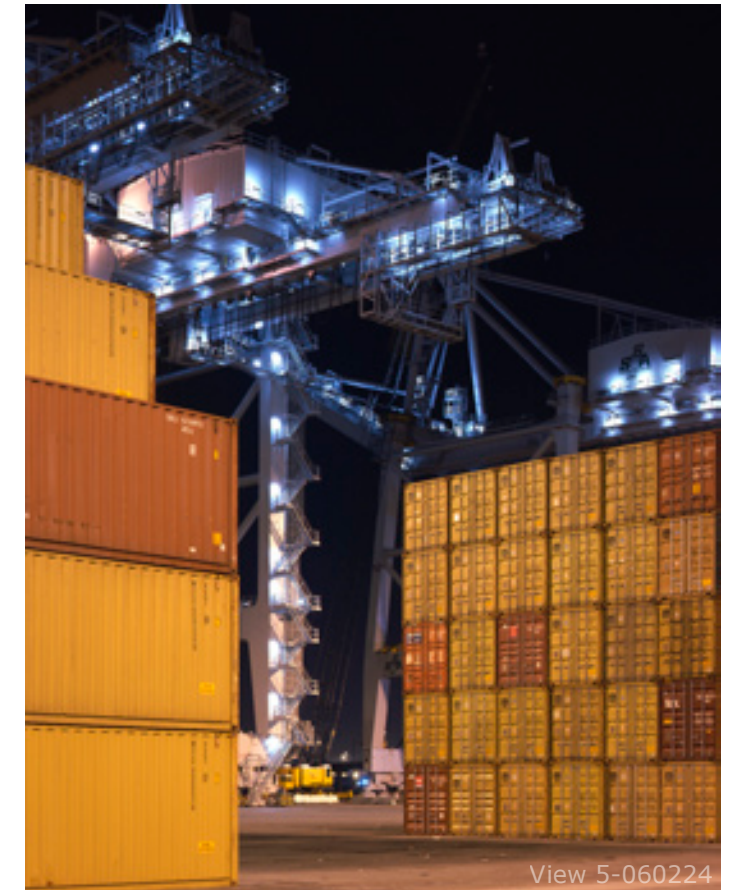
MC [Do you subject your wife to it?](#)

TP No. No. I've been married ten years and she's never been out with me night shooting. She loves my work. She likes to see the final product.

MC [I find that when I travel with my wife,](#)

[we basically have to go our separate ways, it just doesn't work.](#)

TP When I travel with my wife, I'm not going to go out there and hustle and try to do a lot of



things. At the holidays, I did a family portrait with the Graflex 4x5 SLR in black and white, it's wonderful. I did 8x10 prints for the whole family and they just loved them. Black and white at the holidays is so old school! I did some night photography over the holidays, too. It was fifteen degrees at night and blowing snow. Here I am with the only camera I had with me, my Graflex with only black & white film. I did some night shooting, some twenty minute exposures. They came out great. But who's going to want to be out in fifteen degree weather for twenty minutes standing around?

MC [That's cold – I know.](#)

TP You walk around with your hands in your pockets. You have a coat on and gloves and you're cold, and the camera's out there doing its thing.

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MC The Norwegians have a saying that there's no such thing as bad weather, only bad clothing.

TP So true.

MC I've only shot once at night when it was twenty degrees or so and windy, and it was so uncomfortable. It takes a certain kind of person to really, really, really want it.

TP My brother rendezvoused with a Canadian night shooter, Larrie Thomson. Larrie goes out in ten, fifteen, twenty below zero, doing his night stuff and popping flashes. He shoots in the Canadian and American Midwest at night, even in the winter. He keeps the engine running in the car all night. A great night photo he has is of a low shot of this icicle coming out of the tailpipe, attached to the ground. Ice coming out of the tailpipe of a running car!

MC It seems as if there is very tight knit group of people centered around the Nocturnes website and all these offshoot sites. They seem to all know each other.

TP I went to the Academy of Art with Lance Keimig and Tim Baskerville and we are all still shooting at night some twenty years later. Unfortunately, with family, businesses and geography, we don't really talk as much as we used to. The web has shown us all that there are more people out there doing the night thing than we ever could have imagined. Just check out the site, www.thenocturnes.com and see that there are literally hundreds of night shooters out there working.

MC That's such a fabulous resource.

TP Things change, times change. I think that

over time the night photography fad will wane. Some people are going to get upset at my saying that. So many people are into it — just check out flickr. We'll see somebody's experimenting, they



get images that they like, put them all online. You have the TV screen on the back of the camera. It's the new Polaroid—instant feedback. If a scene doesn't work, you shoot again. If you don't like the color, you fix it later with Photoshop. But that's exactly the problem.

MC I think it comes down to a recipe that involves a little bit, quite a bit of luck, but also in the end, patience. And the whole technical side has disappeared because it used to be that that was the most onerous aspect of it. You really did have

to know your film, know your processing, know your reciprocity and now you don't have to.

TP Right. And once it becomes easier, it loses its charm and its mystery.

MC Alas. Easy seems to be what everyone wants these days.

TP I've been in a doldrums earlier this year and had a difficult time getting pumped up — I haven't shot nearly as much as I did in '06. But I'm starting to get back into it.

MC What helped you out of this doldrums?

TP One thing was figuring out ways of reducing the physical challenges of schlepping gear, especially with all the "security" requirements at airports.

MC Give me an example.

TP I'll take a 4x5 with me to New York for a couple of weeks for a shoot, and ship the film ahead. Then I'll ship it home. I'll carry the lenses and field camera with me just because I don't want to ship them — too much invested in the set the lenses that I have. The airlines have been unfriendly to photographers lately — and most everyone else, too.

MC When you ship film, you mean via FedEx?

TP Yes, I FedEx the film to the hotel and write "hold for (my name)-future guest" on it. With better hotels it's in my room when I arrive.

MC Do you also FedEx back to your processor?

TP I use to do that but I don't anymore, as the new lab I'm working with is uneasy processing film without explicit instructions. I just ship it back to myself. My old E6 lab shut down in January, so I have to drive quite a ways now. Even though it's only eight miles away it can take forty five minutes with traffic. It's part of life in LA.

MC This might then explain another reason you like night photography: There's less traffic late at night.

TP Yes, but the labs have cut their hours back. You used to be able to drop your film off at a lab at 10pm. When I moved to LA, about a dozen years ago, there were three or four photolabs in LA open

twenty-four hours. I could go in there and drop film off when I finished shooting at two o'clock in the morning. And if I needed more film, I could get it there, too. It was great — very handy.



MC Do you tend to shoot with an assistant or do you still tend to shoot solo?

TP I like to work alone, I can concentrate more and twilight is a key thing for me which takes a lot of concentration and you have to move fast. Twilight is really only a few minutes for the camera. I really like twilight. You'll see that in my images. People say: "oh it's so hard shooting that time of day" but when you get the work back and it works, it's great. I like to be able to see nice warm tones mixed with cool ones. Eight months ago I tore a rotator cup in my left arm — a typical photographer injury. All the fifty pound camera cases that have been shouldered finally takes its toll. I have this hard case with wheels on it with handles. It's great but it weighs seventy pounds when full. People said:

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well it's got wheels on it, what's the problem? But you've got to lift it in and out of the car!

MC Exactly.. I myself need to be careful about my back — chronic back pain.

TP So if you have to go anywhere without the car you might have to go up and down a short flight of stairs or you've got to lift this thing up and carry it up and down, up and down. Camera cases and bags are a very personal thing. That is why there are hundreds to choose from. Currently, I am using several 15-25 pound cases to ease the weight per case. I transfer what I need to a small shoulder bag and work fast and light. It's a lot easier to maneuver and I bring a little dolly which I pile everything onto. I have a soft sided bag. I bought an old Zone VI white bag on ebay popular in the seventies. Remember those?

MC Of course! They were great.

TP You can see the white bag easily at night, too. They're perfect for a field camera, two or three lenses, the light meter, and accessories. And then what I do is I take the field camera out, I put it on all the holders right where the camera was. And that's very easy to transport.

MC Don't you use a Toyo Field?

TP I've owned a Toyo Field. I found it did not have enough movements for me. I'm now using a Canham DLC45, as my field camera.

MC That's a sweet piece of machinery there.

TP It's a nice camera, with virtually unlimited movements and only about 4 ½ pounds. It can take my 58mm lens to my 450mm lens with the same bellows. All told, I have about a half dozen large format cameras. The Canham is the one I travel with, since it is so compact and light. I already mentioned the Graflex, which is a working camera — it's not a toy. I also use Toyo G mono-rail cameras, one with a short rail and bag bellows and another with long rail and pleated bellows. These cameras are heavier but very sturdy, especially in any sort of wind. I also have a Toyo G 8x10. It can be a challenge keeping a view camera



perfectly steady for an hour — wind or not. I also don't mind heavy tripods, so I use studio ones, both Gitzo and Slik.

MC Your pictures seem to have a certain kind of view. Neither seriously wide nor very long. You seem to prefer a middle ground. It would appear that you're shooting a lot of, somewhere between 90 and maybe 210 and that seems to be the bulk of your work.

TP You got it. The 90mm is probably the most commonly used lens for me. I travel light. Next month I'm going to be sailing on a freighter — what they call a bulk carrier: a thousand foot long ship full of sand.

MC This is a project for yourself then?

TP Yes. It starts as a commercial job, but I use it to shoot a lot of personal work. The client is

giving me full access but they want to see what I shoot. They said, "if we like it, we'll buy it. If we don't, we won't". I like working that way, because it lets me shoot what I want, rather than being encumbered with a long shoot list. Clients don't really know what they want until they see it anyway. But most importantly, I am getting access to a very interesting and rarely seen industrial environment; a working ship at sea. I'm paying for my own airfare and expenses. I'm going to be taking a 4x5 and my most common, lightest set of lenses. It will be in a carry on bag the same size of most serious 35mm photographers. Digital equipment, too, of course.

MC I guess where I was going with this is I don't sense that you use a lot of movements other than your normal architectural ones of rise and that

kind of thing. But maybe you do much more.

TP I do a lot of architectural work. Shooting, working with architects, lighting designers, contractors and landscape architects. I do use movements. With the Schneider 90 XL, for example, I can shoot a ten story building from across the street, architecturally correct. That's pretty impressive to be able to do that. Photographers from the 1950s (or earlier) would be envious of such capabilities. And I use movements in other work where the viewer might not be aware of it.

MC I particularly like the image of train wheels in the foreground.

TP That image has front fall and front tilt.

MC Now the pictures that seem, I don't know if I could use the word typical, but the ones that I've come to know you for are these images where you embrace color. In particular View 8A-061019, which looks like some sort of... I don't know what the heck it is. But it's got a sunset and night skies, it's got green lights and orange lights. It's fabulous.

TP That's a ship loader. That thing runs back and forth and that's the conveyer system you're looking at there. People look at that, they ask: what is this? It looks like some sort of space ship.

MC Oh it's wonderful. It's so mechanical; Great composition, beautiful coloration. It's a treat for the eyes to look at.

TP It was a fun shot to do. And I do like the mix of colors and saw it as such just before I shot it. There's no filtration on that either.

MC Again you're not trying to correct anything. You're just embracing it for what it is. However, when you do color correction, are you doing it with filters or are you doing it processing or a combination?

TP Most of them are done in camera. I'm an in-camera kind of guy. It has always been my goal to get as perfect a transparency as possible to begin with. But you rarely get it right on the

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money. It's almost impossible to get the last five points because you have variables such as the age and brand of the bulb, or even how dirty the light fixture is. And all that's going to affect the coloration. So I usually get it within five or ten points. And then when I scan them, I'll fix it with Photoshop. Take, for example View 8b-061017.

MC Okay, yeah, that's more of a foreground piece with the ship in the background.

TP That one, for example, has CC30M magenta filter to fill out the sodium vapor green that would cast on that and I wanted to make it look natural. Well I was off by a few points and it was a little greener than I would have liked, so I added a little magenta in Photoshop when I scanned it. If I were to reshoot it, I would use a CC40M filter.

MC Do you ever use graduated filters?

TP I use those quite a bit.

MC Perhaps the foreground's too dark, too bright, you'll try to darken that a little bit?

TP I have 1, 2 and 3 stop neutral density filters. Two is by far the most common. I've had them for years. I use Lee Filter Holders most of the time. But I do have other brands because they have different densities and different characteristics that I like.

MC Do you shoot Polaroid?

TP I do one sheet of Polaroid for almost everything. I use Type 55. It helps to see glaring problems, such as forgetting to stop down, the bag belows obstructing the view or whatever.

MC Sure.

TP But really what I'm looking for is not the exposure per se. Instead I use it for composition or to check for critical focus with the negative.

MC Maybe something your eye couldn't see quite well.

TP Yes. Also I can check for flare or to check for an objectionable object you did not see on the ground glass. It's difficult to see everything on that ground glass at night.

MC You'll look at the 55 negative itself then?

TP Exactly, I look at the negative. And then I



save the print. It also gives me something to write on, such as exposure info, or any particular important data.

MC Do you throw the negative away?

TP Yes, I throw the negative away, but it served its purpose.

MC Makes sense because you're not going to bring the sulfite bath with you.

TP Well I've actually done that before. But the exposure for the print is different from the negative, so you have a stop, stop and a half more exposure for the negative, which means you really have to burn two Polaroids — but if you have to do that, then you could just as easily shoot traditional film. Type 55 Polaroid is now about \$5 per sheet.

MC In order to make the view, do you have a little light table that you can put this wet negative

on or how do you do that?

TP I carry at least a half a dozen flashlights of all sorts. It seems you can never have enough flashlights. I have a really nice flashlight with twenty little LED bulbs in it. At the moment I'm driving an old Volvo wagon and I work out of the back. I shine an LED flashlight on a white cardboard and that's my light box which I can use to check the focus and anything else that I want to see. I have portable light boxes too, but that's just another item needing batteries.

MC And you'd also have to deal with clearing of the negative.

TP It's a hassle in the field. The right way to do it is to shoot the Polaroid, and after making your exposure, release the film from the holder using the tab on the Polaroid back, pull it out and pro-

cess it when you get home.

MC Process that separately, right?

TP Yes when I get home, I peel it apart and throw the print away because it's over exposed, but now you have a good negative. I've done that many times. It's a great film. If it was good enough for Ansel, it should be good enough for the rest of us.

MC Well it's an amazingly tight negative — practically grainless.

TP It's old Kodak Panatomic-X film.

MC ASA of 50, isn't it?

TP Yes, I rate it at 50.

MC Accounting for reciprocity, your 160 films are likely rated lower?

TP When I shoot Fuji NPL (rated 160 ISO) for a color negative, I indeed shoot it at ISO100. Modern films have gotten so much better. It holds shadows better and gives a more colorful negative because of a bit more saturation. Reciprocity is really not as important an issue as it once was. Up to a minute or two, there really is no problem with reciprocity with the modern films. At night, I recommend Fuji Acros for black and white and Fuji Provia, and Astia or the Kodak E100 series of films for chrome. All are excellent with reciprocity.

MC Are you pulling your film in order to keep the contrast down or are you just shooting it normally?

TP I pretty much shoot it normally seventy five percent of the time and otherwise, I wind up pushing it a quarter stop.

MC Oh, pushing. Really?

TP I like to push it a quarter because I like that "snap" in the transparency. Unless I have an exposure issue, then I'll pull it a quarter or a half or something at that time. Anything more than that, the transparency gets muddy and dead. But of course in Photoshop you can bring things back. Because of you, Michael, I now shoot a color negative almost always with each view. You taught me that. See I listen to you, too! Back in

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Massachusetts [at the View Camera Conference] you said: shoot a color negative because sometime in the future that's what you're going to be working from. So now I do shoot color negative. There are a few images that print up better with the negative than with chrome film. The View 8-060903, which is an 8x10 shot, on Fuji NPL.

MC Well I'm a big fan of color negatives. The only thing that is always a pain is you have to scan it before you can "see" it, even though I've learned to look at a color negative, it's still not the same thing.

TP I find that I can look at a negative and at least see that the exposure is correct, by seeing details in the shadows and you can still check it to see if something's out of focus. Another one is View2-060831.

MC That's stunning.

TP I used a split neutral density filter with this shot to darken the top because I knew there would be contrast issues. I used Fuji NPL negative and I scanned

then I brought up the green a little bit more on that section. I don't know how to use layers or channels in PhotoShop, but I have people do that for me when I need it. But this one I did myself. And I like the way it came out; it's so much better than the chrome. The foreground is way too dark in the chrome. There's a nice latitude with Fuji NPL. As I recall, it was about 7 stops between the foreground and background in this image.

MC Well you can get nine or ten stops with a color neg.

TP Wow, that much? I figured about seven or eight stops.

MC Yeah, chromes are generally six or seven. But then, as Lance pointed out, there is no such thing as a bad exposure at night. It just looks different, that's all.



View 8-060903

TP Chromes are a lot less forgiving.

MC It's not clear to me where color film is going to go. Clearly professionals are moving completely to digital because they have the clients who demand it and they have the return on investment because they shoot enough volume.

TP Digital is the future whether we like it or not.

MC So that leaves amateurs with either doing black & white which there'll always be somebody to provide black & white materials. Then there's that big question mark over large format color materials and it's not clear which way we will go.

TP What's happening is that the view cam-

era market is moving to serious amateurs and fine art. There has been a resurgence in large format, which I find fascinating and contrary to the digital-only crowd. Your magazine and View

and you are a lot better photographer than I am". I said, "but you make more money than I do". He said that's beside the point. There is a fine line between commercial and fine art photography and it

is not about the subject, but how it is done and why. When you make 30x40 inch prints, if there are any flaws in that original image, it's going to be right there. Even though it's 30x40 inch print from a large format negative or transparency, people get right up close in a gallery or museum. In one 30x40 inch print in the exhibition, there was with a 6 inch person in the shot. You can read the name tag on his shirt. There's a lot of information in a large format chrome or negative. People are not used to seeing that much detail; they are mesmerized.

MC Sure. I think this is why we shoot large format.

TP Commercially, it's all about money. "Processing" is now done in-house. One person is chained to his desk and they do Photoshop all day: day

in, day out. Processing all the RAW files, burning CD's, whatever the client needs.

MC What other shots do you feel passionate about?

TP View 8-060903, a Fuji NPL color negative shot. The assignment was to shoot a dramatic 2.5:1 panorama.

MC Is your idea is to crop off the bottom?

TP Bottom quarter and the top quarter. They wanted an 8x20 FOOT print.

MC Yikes!

Camera prove that the niche is thriving. I have a friend who shoots architecture commercially one hundred percent. He stopped shooting film over a year ago. He really has no passion for photography. He got into it, and makes a very good living, and has a fancy house. He's done very well. A couple of years ago, I had a one-man show at the Long Beach Museum of Art. All the images were 30x40 inch prints from 4x5 film, beautifully framed, everything first class. My friend came to see the show with me about and said "you really like doing this, don't you?" and I started laughing. I said it's my passion. He said, "you are very good

Tom Paiva



TP They wanted it for a presentation on stage for a board meeting with the press. I suggested shooting it 8x10 and the client did not know what it was. I told her it's going to cost a little more for the film, but we're only going to do three or four views. I had a drum scan made but they had the print done locally. I never did see the large print, but I heard it was quite spectacular — that size with virtually no grain. You could read details on the ship from a half-mile away. This was shot with a normal lens, 300 mm.

MC Sweet. I hope someone noticed!

TP They told me that people came up on stage after the conference, to look at the print up close. It was actually more information than they wanted. They simply wanted something in the background. Like you see behind a talk show host, where they city skyline view in the background. But I wanted to go all out. They loved it.

MC There's nothing like a little quality.

TP I find quality works well. This was my first assignment with 8x10 in three or four years. Nobody seems to want to do that anymore. Maybe it's the cost.

MC How is business this year?

TP Business wise, this year started out slow for me and I got in kind of a funk. It became hard to get motivated and get out and shoot. It was probably the shoulder injury. Then things picked up and to handle it while my shoulder healed, I've used assistants or interns.

MC Do you like it? Are you just being practical?

TP It's nice. You have probably heard of Julius Shulman, the architectural shooter.

MC Pretty famous.

TP He is ninety-six years old and I see his by-line in the LA Times every couple of months. He's still shooting commercially! And it is hard to believe, but I know that he has a full time person that's glued to him that does everything. And he probably has another assistant that loads the film holders or does the schlepping.



View 2-051010

MC Are you describing your vision of how you will retire then?

TP No, I'm not going to be shooting commercially when I'm ninety six years old, sorry.

MC You're going to be sitting on a beach somewhere, maybe surfing, huh?

TP Yeah, right! I can't imagine that! But, I've really learned about the benefits of having an assistant. I think I'll do that more often.

MC You've been working a long time. Do you have many images stored digitally?

TP I have these old dental file cabinets I picked up somewhere that are full of 4x5's, thousands of them, and I have standing metal cabinets with roll film that goes back some twenty years. I have external hard drives, that are 400GB and they are full of photos, too.

MC It's an amazing time because everybody who's any good at all has gigabytes of imagery and it's not just one or two people, it's not one or two thousand, it's one or two hundred thousand people who have the same problem of storage and volume around the world.

TP A photographer friend and I joke that maybe some day some kind of ion rays or something will be caused by a sun flare and it'll wipe all the hard drives and all electronics will crash. It would be very interesting what would happen then. You embraced digital right from the beginning, which I've always been impressed with. I had a neighbor, a young woman in her twenties. A number of years ago, she photographed a wedding for a good friend of hers. When she was downloading the images, they disappeared. They came off the

card, but didn't go into the computer. The card was empty, the computer was empty. The poor thing was in tears. I wonder if the digital images ever existed?

MC Well truth be told, in our day did you or did you not take a whole roll of film with a rangefinder with the lens cap on it?

TP But that lens was protected!

MC We've done the same thing before and tears came with that, as well.

TP Many years ago, I was lucky enough to have lunch with Alfred Eisenstadt when I was in college. There were just six or eight of us. He had such a droll sense of humor, even though he was a rickety old man in his 80s. I asked him "what is the biggest mistake you made in photography?" He looks at me and smiled and said there are so many of them. His favorite was during a portrait session of Queen Elizabeth for Life magazine back in the fifties, and he forgot to put film in the camera. We all burst into hysterics. We have all made these sorts of mistakes, but Eisenstadt had an open, matter-of-fact attitude. He also said you will have to make the same mistake at least three times before you really learn it. So true.

MC I myself had a similar situation. First time I used Fuji QuickLoads, I said this is great and I went out to Santa Fe to shoot. So here I am shooting QuickLoads convincing myself that I was pulling them out correctly. And I get back and literally half of them were blank. I spent the next week practicing ruining films, saying to myself: okay, you have to grab it this particular way. I guess I wasn't prepared for it because I had been used to ReadyLoads.

TP The double sided Kodak ReadyLoads were horrible. Like you, I was losing, between a third a half. And it was driving me nuts. Do you know what I wound up doing? I had several boxes of them. I wound up going in the darkroom

Tom Paiva



and taking them all apart and just loading them into normal holders.

MC Oh there you go, sure.

TP I wouldn't buy them for years until they went to the single design like Fuji did. Now I have a Fuji back and a Kodak back. I shoot regular sheet film when I'm in town, ninety percent of the time. But when I travel, where I have to get on an airplane and go, then I will shoot QuickLoads and ReadyLoads because it's more convenient.

MC So if you're not going to be doing commercial photography, might you move more towards art photography?

TP I am Michael, I am. I moved towards the art scene in the last couple of years. Commercial photography is leaving me cold, but having the commercial work is a necessity. It gives me the access to the types of environments I shoot for my art.

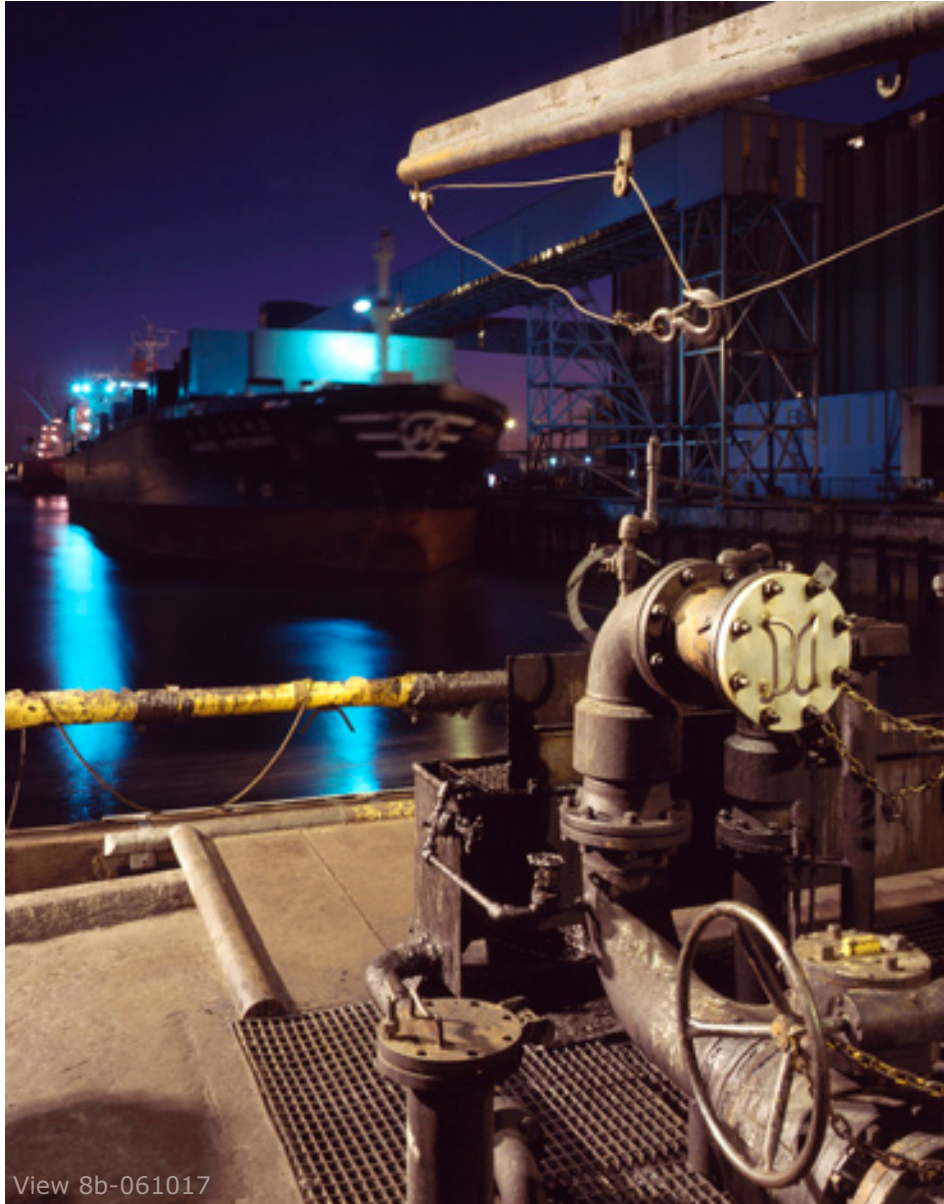
MC We all have our crosses to bear.

TP Unfortunately what many clients are doing now is that they go out and buy a little Canon Rebel or similar, with a semi-wide lens on it, and then they give it to the secretary and say, go out and shoot such and such strip mall or office building. The secretary is happy to get out of the office. They get a couple shots of the lobby, a couple shots of the outside and the inside. They get shots back, download it and it's finished. And the work sucks and they know it. But they don't care.

MC Right.

TP That's the part that's so depressing. I give

them beautiful, gorgeous twilight, architecturally correct, razor sharp images and they say, yeah, but you're billing me to do this. They say it doesn't cost us anything to use the secretary and it's good



View 8b-061017

enough for what we do.

MC Well I've got to say, I've heard this before. In the mid to late seventies, that's when all the new 35's were coming out like the Canon AE1. Suddenly everybody bought a 35mm camera, practically overnight. Whereas ten years earlier cameras were still a mystery to most people. By the late seventies, I remember we came to the same conclusion: that we were getting squeezed out by people who had recently bought a 35mm camera. They could stick in a roll of Kodachrome and if

they were in the right spot at the right time, they could take pretty good pictures. It turned out to be false, of course, because there's much more to photography. But there was some truth to it, too. There were some jobs that went to — I guess 'amateurs' is the right word. I think we're just seeing the same thing today. The whole world is being turned upside down and the strong will survive.

TP I have this particular expertise and it has taken a long time to hone. When I assisted years ago in art school, I did it for an old timer in his late sixties. Most everything was shot with a Speed Graphic. For him his Hasselblad was a small camera. We did product shots for his regular clients, and I'd help him with the lights. Here's a guy who would rarely used Polaroids. He rarely used a light meter. He would know his light situation by experience.

MC You were lucky to have such a teacher.

TP Once when we were outside of a building, I would take out my light meter. He asked, why do you need to meter? And he started explaining to me exposure. We're on the shady side of the building, it's two stops less than the other "sunny side". It was just as simple as that. It was about thinking rather than just measuring. He was definitely "old school", in this age of light meters that read tenths of a stop and automatic multi-matrix metering in-camera. When the Speed Graphics company went out of business in the early seventies, he went out and bought six cameras because he was afraid he wouldn't be able to get them anymore.

MC Many people did the same.

TP When he retired he gave me a few things. I still have some of his photo doodads. He had a blood vessel burst in his viewing eye and it became blind.

MC That is so sad.

TP There's little need for a blind photographer.

MC Is there another book coming from Tom Paiva?

TP I've been thinking about that a lot lately. My work since my first book, Industrial Night, is

so much more polished and of a different character. I get tired of older photos, which makes me shoot more. You get into your mid fifties and it's time to do. I've done well. Financially I'm fine, but

Commercially, it's all about money. "Processing" is now done in-house. One person is chained to his desk and they do Photoshop all day: day in, day out. Processing all the RAW files, burning CD's, whatever the client needs.

I can't retire yet. But at the same time it's time for me to be shooting exactly what I want more of the time. My wife Lee says, we should self publish the book again. I want the new book to be photographs shot really recently.

MC That keeps you honest too because in most businesses you're only as good as your last project.

TP Some of this work is weeks old but nothing more than a year and a half.

MC You've been a busy boy.

TP A while back, I did a road trip. I went to a friend's wedding in Portland, Oregon. I decided to drive from LA to Portland, stopping in San Francisco for a job, and my wife flew directly to Portland. I spent three days driving from San Francisco to Portland and I shot every night. Staying in

Tom Paiva



little fleabag motels and exploring. At one town, I snuck into a lumber mill. I just walked over a fence that was three foot high and set up my camera in the shadows and I just started shooting. I did a lot of things like that. There are three images on my website from that road trip, so I probably need to do more things like that, but like everybody else who does commercial work, it is tough finding the time to do it.

MC For me it was difficult when I was a studio photographer. I was in the darkroom until midnight every night. And in the studio at eight in the morning. After four years of that, I just got burned out.

TP Wow. I know the head of the department in the school I just taught at, was a food shooter. She did that for about twelve years. All 4x5 and 8x10. She says, "then all of a sudden I just couldn't do it anymore". She started to teach instead as her livelihood and that freed her up to do more shooting for herself.

MC Where do you see yourself heading?

TP I love large format cameras and enjoy the process of film not unlike Spielberg and other similar aged cinematographers who prefer film over digital. There will be a time when you won't be able to shoot color transparency film anymore and the work that many of us are doing now will have a different look and feel than what will be done in the future. My goal is to continue with what I am doing until I can't do it anymore or the film or processing disappears completely. Digital has a long way to go, but it will take over even the fine art market, I predict.

MC Isn't that cool that the same digital revolution that's making everybody pick up a digital camera is also allowing you to self-publish!

TP Actually, I published my first book before the digital revolution, and I would be able to publish a new book regardless of digital camera technology. But the bigger point is that digital is here to stay and is having a profound impact on all of

us. My brother's a graphic artist and his profession is slowly dying for the same reason. People are learning how to use Photoshop and Illustrator in school. They are coming right out of college very proficient in using new technology. It's taken my brother years to learn all this on his own.

MC We've all been there.

TP But now the kids go to college and they take a Photoshop class, a class on PowerPoint, a class on this, a class on that, and they know how to use these programs and when they finish, they're computer savvy. That's why I've come to the conclusion that technology is the new photo school. The photo assistant does Photoshop work now.

MC That's the new darkroom for sure.

TP My daughter's twenty six. Her roommate is a photographer, of the same age, and she does studio work and RAW shooting digital, but she slaves on the computer at night because every image seems to need to be 'fixed' with Photoshop. She does that on her own in her room, on the computer. Between assistant work and Photoshop, she makes a living. It is all about computer now. They are not good or bad, it's just different and it's changing all of our lives, not just for artists.

MC I feel for all of them. My wife and I joke: we both need a wife!

TP Ain't it the truth. But in the final analysis, no matter what the technology or the technical methods, it is about the conveying what you see in a provocative, evocative, and original way. It is about sharing your unique vision through a medium you have mastered and that you push to its limits.

MC



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There are many ways we can work together.

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LARRY WRIGHT, A PORTFOLIO



I like making things in general, but I especially like making black and white photographs. I enjoy the processes of photography and the final product. Photography, of course, can be difficult and frustrating, but the challenge is a large part of the appeal. Every photo is an experiment. I use a large format 4x5 camera because a lot of skill is needed to take consistently good photos and I love the detail in the finished prints.

My early attempts at night photography were actually fairly successful. I gradually improved my technique and, I hope, vision. I take night photos mainly because I really like night photos. They communicate a different feeling than photos taken during the daylight hours. Night lights can isolate scenes and subjects from surrounding distractions, giving a photograph a strong "center". I'm generally looking for the hidden beauty of common subjects that often go unnoticed. On a practical level, taking pictures at night fits into my family and work schedules as I have a full-time job during the day.

I am sometimes asked, "Why black and white"? This is a hard question to answer because there are so many answers and so much that I can't explain. Near the heart of the matter is the way black and white engages the viewer. Briefly, black and white greatly simplifies a subject by reducing it to its basic elements of form and texture, light and dark. This allows the viewer the freedom to add a bit of his or her own imagination to complete the image. It is like a story that briefly describes a scene. The reader automatically fills in the details with his brain, enters the scene and becomes a part of it. Black and white demands some work on the part of the viewer, but the effort increases the viewer's emotional experience.

*You can contact Larry at
wright818@gmail.com*





MC



Sinar Hy6: A major step forward in medium format



Sinar, the legendary Swiss company that pioneered the use of digital imaging technology in the professional photography market, is bringing to market its much-anticipated Sinar Hy6 medium format digital camera system. The Sinar Hy6, which received the Photokina Star 2006 award for most outstanding new product, is the result of collaboration between Sinar, the technology giant Jenoptik and Franke & Heidecke (Rolleiflex). Designed to capture images using both digital and conventional film backs, the Hy6 offers photographers a true 6x6 cm medium-format size with the flexibility of a 4.5x6 cm camera.

"The Sinar Hy6 embodies the technological know-how, precision engineering and manufacturing of three world-renowned companies whose single objective was to create a medium-format camera system that is intuitive in design and second to none in performance," said Cathy Strobel, President, Sinar Bron Imaging. "A fully integrated digital system, the Sinar Hy6 will support the entire Sinar digital product line-up."

The Sinar Hy6 is based on an "open system" design and can easily adapt to advancements in future chip technology by allowing the insertion of larger (higher-resolution) image sensors of up to 56x56 mm.

The camera's synchronized flash speeds of up to 1/1000 second, combined with a wide selection of high-quality Sinaron, Schneider and Zeiss lenses, deliver optimum image quality and edge-to-edge sharpness in any situation. The Sinar Hy6 can be operated either by using the controls on the camera or remotely via computer by using the Sinar CaptureShop™ software, a key feature for studio photographers. An integrated LC display on the rotating control grip allows photographers to see and read settings from nearly any angle. This is especially important for photographers working from the computer.

"The Sinar Hy6 offers numerous features that give photographers the freedom, flexibility and functionality they need to remain competitive in today's digital imaging marketplace," said Ms. Strobel. "Sinar's legendary commitment to quality combined with support from parent company Jenoptik is a winning recipe for the success of this camera."

The Sinar Hy6/Sinarback eMotion 75LV medium-format digital camera system will begin shipping in the U.S. in mid-July with a suggested catalog price of \$32,500. The Sinar Hy6/Sinarback eMotion 54LV will have a suggested catalog price of \$30,500. The Sinar Hy6 System will be supported worldwide through authorized Sinar service centers.

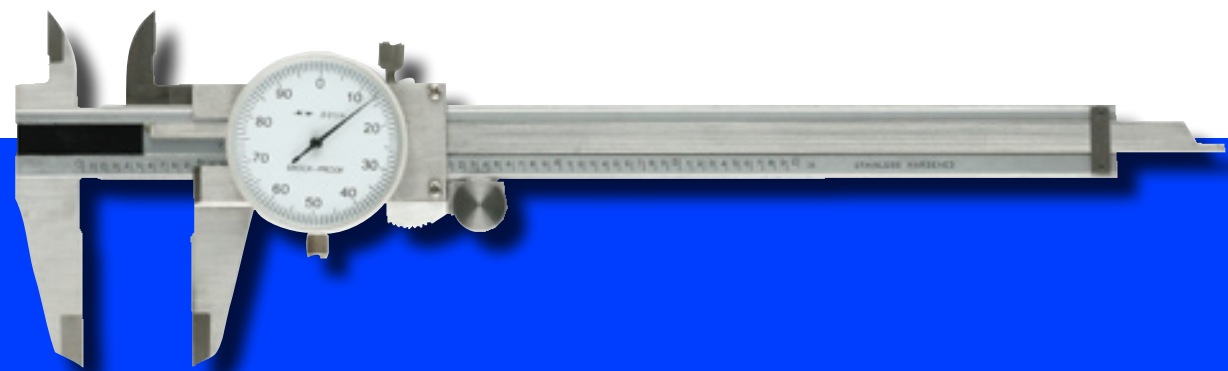
Main Features:

- ▶ Fast and accurate auto focus
- ▶ Easy-to-grasp operating concept
- ▶ 90° viewfinder with adjustable diopters
- ▶ USB interface for firmware upgrades
- ▶ Open interface for user-friendly back adaptations
- ▶ Waist-level finder with flip-up magnifier
- ▶ Compatible with the existing range of Rollei-branded lenses and most other system accessories



Editor's note: Look for an in-depth review of this camera in a future issue of MAGNACHROM

Hy6



24 BALLHEADS COMPARED

Ballheads are probably the most popular style of tripod head sold today. Much of their popularity can be attributed to their compact size and light weight. Ten years ago there were only a handful of available models to choose from. Today however, there are abundant models for a wide variety of applications.

We wanted to see how much had changed in the past decade by comparing the new breed of ballhead to the now classic Arca-Swiss B1, which while it is still a fabulous and useful accessory, in comparison is somewhat dated design. What we found was that other manufacturers have not been sitting still — each one trying to differentiate themselves with a unique feature, price-point, or weight advantage. Arca-Swiss too has been trying to outdo themselves and their newest designs are present here as well.

Unfortunately, and in spite a repeated emails and phone calls, a handful of manufacturers opted to not participate in our review (they shall remain nameless). Our take is that the competition for ballhead sales is so great that

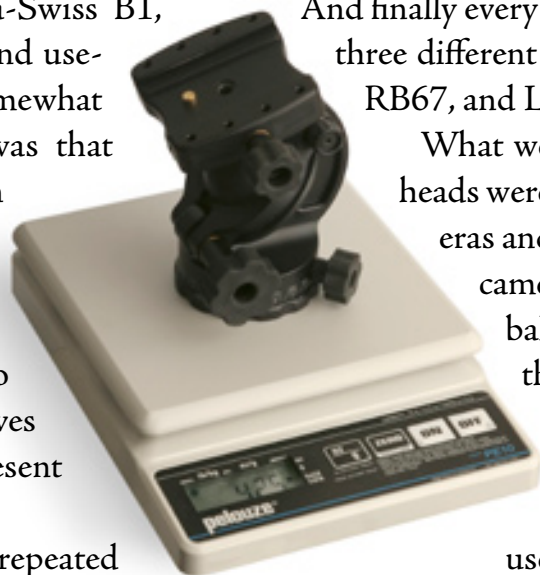
some fear such a head-to-head comparison.

We did not exhaustively test each ballhead, rather we simply wanted a fair and neutral comparison so that you can better judge the merits of each product. To make the weight comparison meaningful, each ballhead was weighed without an accessory plate. All dimensions were measured with a micrometer. All were photographed from the same orientation and on the same tripod and present here on these pages at 100% full scale.

And finally every one was manually tested with three different cameras: Mamiya 7, Mamiya RB67, and Linhof 45S.

What we found was that certain ballheads were better suited for lighter cameras and others were better at heavier cameras. We took points off for ballheads that were heavier than the B1. In keeping with conventional wisdom, most of the ballheads tested were more than adequate when used with the Linhof. Yet doing

minor readjustments with a heavier large format camera proved less than ideal with most ballheads. Thus few achieved a status of “ideal” when used for large format applications.



Arca-Swiss, B1

Clamp type	Arca-Swiss style clamp
Weight with clamp	755g (1lb 10.6oz)
Base diameter	74mm (2.91in)
Overall height	108mm (4.27in)
Ball size	55mm (2.16")
Country of origin	France
Claimed Load Capacity	40.8kg (90lb)
Clamp attachment	11mm hex
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	2

approx. \$380 US [retail]

Appropriateness:

Mamiya 7II	** (overkill)
Mamiya RB67	**** (ideal)
Linhof TK45s	*** (good)

The B1 is the classic ballhead that most photographers are already familiar with. Serves as the benchmark for all others to compare to. At 755g it is a bit heavy for use with a Mamiya 7, but this remains the ballhead that inspired an entire industry.

Unique feature: elipsoidal ball prevents sudden drop.

This head also popularized the Arca-Swiss style modular clamp that so many other accessory manufacturers like Kirk, Really Right Stuff, and Acratech have adopted as “the standard”.

755g



Ballheads

MAGNACHROM

Arca-Swiss, Z1 (sp)

Clamp type	Arca-Swiss style QR clamp
Weight with clamp	685g (1.5lb)
Base diameter	72mm (2.8in)
Overall height	104mm (4.1in)
Ball size	55mm (2.16")
Country of origin	France
Claimed Load Capacity	59kg (130lb)
Clamp attachment	1/4 hex head
Tripod socket	3/8" (1/4" insert)
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	2

approx. \$350 US [retail]

Appropriateness:

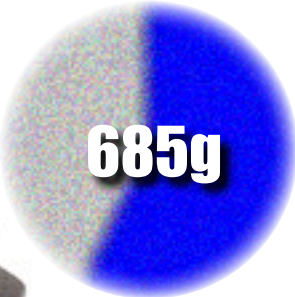
- Mamiya 7II ** (overkill)
- Mamiya RB67 **** (ideal)
- Linhof TK45s *** (good)



The Z1 is the replacement to the venerable B1. It is lighter and can carry more weight than its predecessor. Various clamps are available, including a mulit-panning option. In spite of some fierce competition, it remains one of the best all-around ballheads available.

Unique feature: elipsoidal ball prevents sudden drop.

Replacement clamps from Novoflex, RRS, Kirk, and Acratech can be fitted to this model.



Arca-Swiss, P1

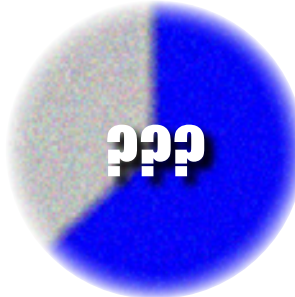
Clamp type	Arca-Swiss style clamp
Weight with clamp	???g (???oz)
Base diameter	???mm (???in)
Overall height	???mm (???in)
Ball size	???mm (???")
Country of origin	France
Claimed Load Capacity	???
Clamp attachment	???
Tripod socket	???
Independent panning	???
Number of drop notches	???
Color	Black w/ black ball
Number of control knobs	???

\$??? US [retail]

Appropriateness:

- Mamiya 7II ** (???)
- Mamiya RB67 **** (???)
- Linhof TK45s *** (???)

The much-anticipated P1 ball-head from Arca-Swiss has an inverted ball with the panning control attached to the clamp — eliminating the need for a separate leveling base. Review item not available at press time.



Artist's Rendering

Ballheads

MAGNACHROM

Acratech, Ultimate Ballhead

Clamp type	Quick Release Thread
Weight with clamp	425g (15oz)
Base diameter	59mm (2.35in)
Overall height	104mm (4.1in)
Ball size	38mm (1.5")
Country of origin	USA
Claimed Load Capacity	11.4kg (25 lbs)
Clamp attachment	3/8-16 stud
Tripod socket	3/8" (1/4" insert)
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	3

\$270 US [retail]

Appropriateness:

- Mamiya 7II *** (good)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)



A unique ballhead that offers exceptional freedom of movement in one direction due to its angled locking mechanism. Ideal for photographers who shoot macro or up or down a lot. Very lightweight at under a pound, this ballhead was capable and appropriate for use with all three cameras tested.

425g

Acratech, GV2

Clamp type	Quick Release Thread
Weight with clamp	445g (15.6oz)
Base diameter	59mm (2.35in)
Overall height	104mm (4.1in)
Ball size	38mm (1.5")
Country of origin	USA
Claimed Load Capacity	11.4kg (25 lbs)
Clamp attachment	3/8-16 stud
Tripod socket	3/8" (1/4" insert)
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	3

\$350 US [retail]

Appropriateness:

- Mamiya 7II *** (good)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)

Probably my personal favorite of the entire bunch, this lightweight ballhead worked equally well with all three cameras tested. Further, it has a unique feature: when turned on its side, the ballhead acts like a gimbal head — especially useful if you have long lenses.

The quick release is enabled via a quick turn thread as opposed to a lever. Either you love it or you hate it. I happen to love it.

All in all, a joy to use.



Editor's Choice

445g

Ballheads

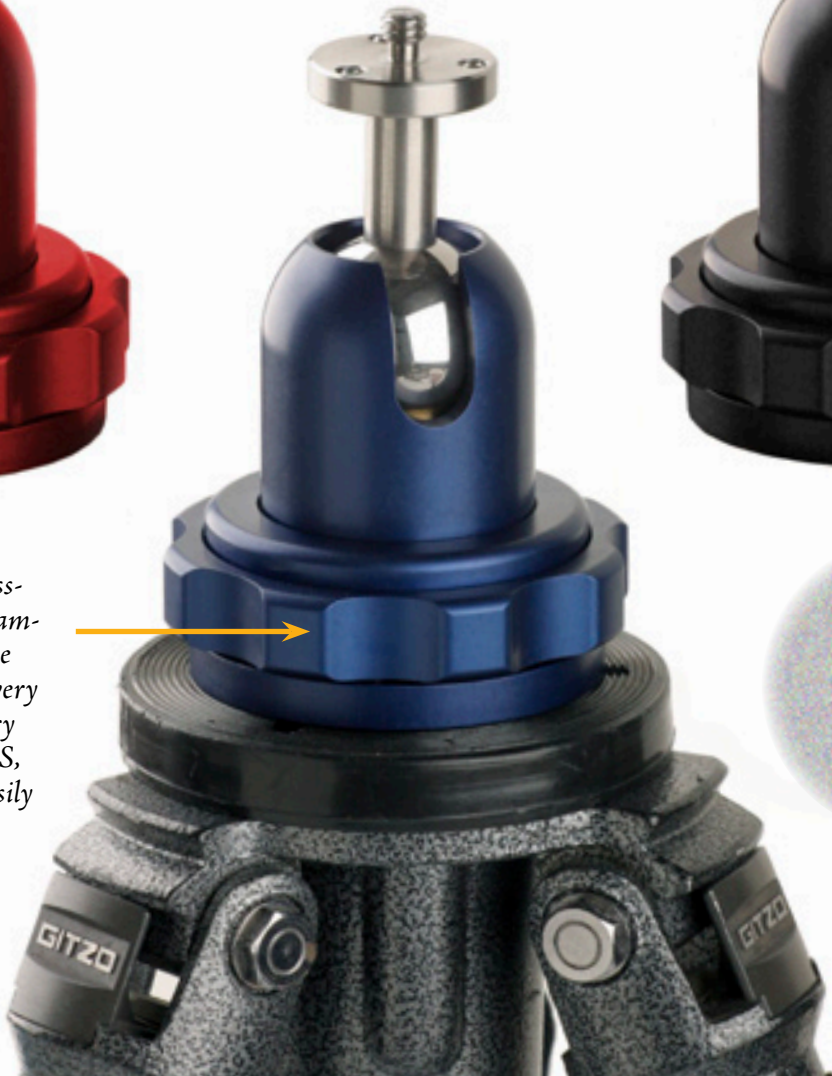
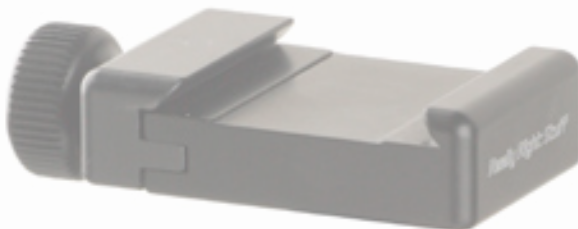
Freedom, BH-12

Clamp type	1/4" mounting screw
Weight with clamp	430g (15.2 oz)
Base diameter	52mm (2.17in)
Overall height	102mm (4in)
Ball size	29mm (1.125")
Country of origin	USA
Claimed Load Capacity	???
Clamp attachment	1/4"
Tripod socket	3/8"
Independent panning	no
Number of drop notches	1
Color	Colors w/ chrome ball
Number of control knobs	1

\$200 US [retail]

Appropriateness:

- Mamiya 7II *** (good)
- Mamiya RB67 * (barely)
- Linhof TK45s (no)



An unusual, single-control ballhead utilizing a stainless-steel ball. For lightweight cameras only. Available in three colors as shown. Provides very quick movements. Accessory clamps from Novoflex, RRS, Kirk, and Acratech can easily be fitted to this model.

504g*

* with RRS FAB mini-clamp

For this review, three popular cameras were tested with each and every ballhead.

Chosen for its light weight was the Mamiya 7II, which for many people represents the ideal travel camera. Ballheads that weighed more than 755g were deemed inappropriate for this camera as the goal with this camera is to travel lightly.

Chosen for its heavy weight and extensive list of accessories, the Mamiya RB67 represents the upper end of what medium format cameras weigh. Ballheads that could manage this camera should work well for pretty much any other medium format application. Note that your medium format camera may fall somewhere in-between the weight of the Mamiya 7 and RB67, so you'll have to interpret our rating for your particular needs.

And finally, we chose the Linhof Technikardan 45S as representative of a "typical" large format application. This camera is neither the lightest nor the heaviest large format field camera so be sure to consider how your large format camera compares in weight to the TK45S when evaluating our subjective ratings.



Mamiya 7II

Weight with 80mm lens and Arca-Swiss style plate: 1485g (3lbs 4.4oz)



Mamiya RB67

Weight with 140mm lens and Arca-Swiss style plate: 2645g (5lbs 13.2oz)



Linhof Technikardan 45

Weight with 75mm lens and Arca-Swiss style plate: 4130g (9lbs 1.6oz)

Giotto's, MH 1302-210C

Clamp type	Proprietary Arca-Swiss style
Weight as shown	755g (1lb 10.6oz)
Base diameter	74mm (2.91in)
Overall height	108mm (4.27in)
Ball size	55mm (2.16")
Country of origin	China
Claimed Load Capacity	18lbs
Clamp attachment	1/4"
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	3

\$110.50 US [retail]

Appropriateness:

- Mamiya 7II **** (ideal)
- Mamiya RB67 * (barely)
- Linhof TK45s (no)

An ideal ballhead for any lightweight medium format camera. Provides full functionality in an exceptionally small, lightweight package. Would be great for use with a monopod. Available with various proprietary clamping mechanisms. (see next page for one example) Replacement clamps from Novoflex, RRS, Kirk, and Acratech can be fitted to this model.



Giotto's, MH 3300-550C

Clamp type	Basic screw (other clamps avail.)
Weight as shown	760g (1lb 10.8oz)
Base diameter	70mm (2.75in)
Overall height	85mm (3.33in)
Ball size	56mm (2.2")
Country of origin	China
Claimed Load Capacity	28lbs
Clamp attachment	???
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	3

\$199.50 US [retail]

Appropriateness:

- Mamiya 7II ** (overkill)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)

An ideal ballhead for heavy medium format and most large format equipment. Available with various proprietary clamping mechanisms. (see next page for one example). Replacement clamps from Novoflex, RRS, Kirk, and Acratech can be fitted to this model.



Ballheads

Giotto's, MH 1301-656

Clamp type	Proprietary Arca-Swiss style
Weight with clamp*	505g (1lb 1.8oz)
Base diameter	50mm (1.97in)
Overall height	105mm (4.11in)
Ball size	36mm (1.41")
Country of origin	China
Claimed Load Capacity	20lbs
Clamp attachment	1/4"
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	3

\$178.50 US [retail]

Appropriateness:

- Mamiya 7II *** (good)
- Mamiya RB67 *** (good)
- Linhof TK45s (no)

* excluding camera plate

An ideal ballhead for any lightweight medium format camera. Provides acceptable performance with heavier medium format equipment. Available with various proprietary clamping mechanisms. Shown is an Arca-Swiss style clamp with macro capability. Replacement clamps from Novoflex, RRS, Kirk, and Acratech can be fitted to this model.



Giotto's, MH 1300-657

Clamp type	Proprietary Arca-Swiss style
Weight with clamp*	730g (1lb 9.6oz)
Base diameter	60mm (2.36in)
Overall height	85mm (3.33in)
Ball size	46mm (1.81")
Country of origin	China
Claimed Load Capacity	25lbs
Clamp attachment	1/4"
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	3

\$208.50 US [retail]

Appropriateness:

- Mamiya 7II ** (overkill)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)

* excluding camera plate

An ideal ballhead for any medium format and lightweight large format equipment. Available with various proprietary clamping mechanisms. Shown is an Arca-Swiss style clamp with macro capability. Replacement clamps from Novoflex, RRS, Kirk, and Acratech can be fitted to this model.



Ballheads

MAGNACHROM

It started simply enough with quest to replace my 11-year old Arca-Swiss B1, a single ballhead that has been flexible, capable, and worked well with all the cameras I use. As such, I was looking for one that was newer, lighter and more capable than the B1 — it would be the basis for any comparison. Ballheads that were lighter would score higher when it came to usage with the Mamiya 7, the lightest of the three cameras I use. Holding power was important for the heavier cameras of course.

However, I did not expect to like so many of the supplied models, originally thinking that surely one would rise to the top of my list. Instead, I discovered a bunch of deserving ballheads that I would seriously consider adding to my own camera bag. These ballheads recieved my “Editor’s Choice” award.

Our rating system explained:

Mamiya 7II

As every ballhead was capable of holding the Mamiya 7II, here the only rating criteria was weight of the ballhead itself.

(no)	1000g-1200g
* (overkill)	800g-1000g
** (overkill)	600g-800g (e.g. B1/Z1)
*** (good)	400g-600g
**** (ideal)	200g-400g

Mamiya RB67

As the RB67 is fairly heavy, the rating here was the most subjective, reflecting a combination of handling, ease-of-use, and holding power.

(no)	could not hold
* (barely)	barely held
** (adequate)	held the RB67 securely
*** (good)	enabled precision movements
**** (ideal)	had exceptional attributes

Linhof Technikardan 45S

Being big and heavy and hard to make minor adjustments, none of the ballheads recieved an ideal rating. Only the Arca-Swiss received a “good” rating here due to their use of an ellipitical ball.

(no)	could not hold
* (barely)	barely held
** (adequate)	held the Linhof securely
*** (good)	enabled precision movements
**** (ideal)	none acheived this rating

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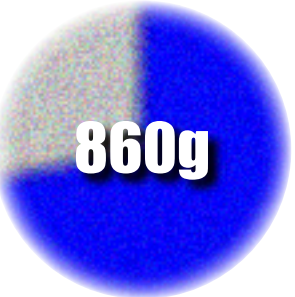


Gitzo, G1376M

Clamp type	Proprietary quick-release
Weight with clamp*	860g (1lb 14.4oz)
Base diameter	70mm (2.75in)
Overall height	133mm (5.25in)
Ball size	30mm (1.18in) off-center ball
Country of origin	Italy
Claimed Load Capacity	6kg (13.2 lbs)
Clamp attachment	Not replaceable
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	1
Color	Grey with Grey controls
Number of control knobs	2

* excluding camera plate

An unusual, off-axis, magnesium ballhead that happens to work exceptionally well with most medium format and lightweight large format cameras. Comes with proprietary quick release clamp. Top-notch controls and fabulous movements. Unfortunately, replacement clamps from Novoflex, RRS, Kirk, and Acratech cannot be fitted to this model.



\$251 US [retail]

Appropriateness:

Mamiya 7II	* (overkill)
Mamiya RB67	**** (ideal)
Linhof TK45s	** (adequate)

Editor's note: the smooth, quick movements on this ballhead are exceptional. We only wish that Gitzo offered an Arca-Swiss style quick release mechanism instead of proprietary ones. Otherwise, this would have earned an Editor's Choice

Ball locking adjustment

Panning base lock

Ballheads

MAGNACHROM

Part of our methodology for evaluating these ballheads was to determine if they really could handle the weight of a camera at any angle. As a simple test, we positioned each ballhead at 45° angle then tightened the locking mechanism with “normal” force to see if it could hold the camera without dropping further. Needless to say, if there was any movement at all such a combination was assigned an appropriateness of “no”. If it could just hold it or if additional tightening was necessary, then it earned a “barely”. Finally, we attempted to make minute adjustments and found it was often difficult or awkward with most ballheads, the exception being the Arca-Swiss line.



No matter that ballheads can be less-than-optimal when used with large format cameras — we love ballheads out in the field due to their light weight and compactness and feel this more than makes up for it. The only question when choosing a particular model is what are the primary attributes you are after: weight? load-capacity? or features?

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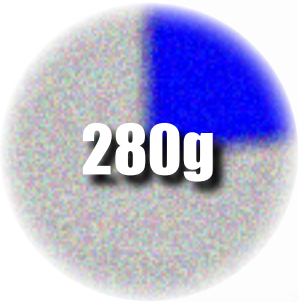
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Manfrotto, 484 RC2

Clamp type	Proprietary quick release
Weight with clamp*	280g (10oz)
Base diameter	34.4mm (1.36in)
Overall height	89mm (3.5in)
Ball size	23mm (2.16")
Country of origin	Italy
Claimed Load Capacity	4kg (8.8 lbs)
Clamp attachment	1/4" set screw
Tripod socket	3/8"
Independent panning	no
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	1

* excluding camera plate

Most manufacturers offer mini ballheads for use with monopods and other lightweight tripods. This one from Manfrotto is typical — works very well with lightweight cameras but will only barely work with heavier cameras (you can forget using it with a 4x5). Replacement clamps from RRS cannot be fitted to this particular model as the tongues that hold the clamp are unique to Manfrotto. With some clever machining however, it can be made to fit.



Single control for both panning and ball locking

\$58 US [retail]

Appropriateness:

Mamiya 7II	*** (good)
Mamiya RB67	* (barely)
Linhof TK45s	(no)

Ballheads

MAGNACHROM

Manfrotto, 468 MGRC4

Clamp type	Proprietary quick release
Weight with clamp*	680g (1lb 8oz)
Base diameter	60mm (2.37in)
Overall height	116mm (4.57in)
Ball size	35mm (1.38in)
Country of origin	Italy
Claimed Load Capacity	16kg (35.3lbs)
Clamp attachment	1/4" thread
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	2
Color	Black w/ black ball
Number of control knobs	2

\$344 US [retail]

Appropriateness:

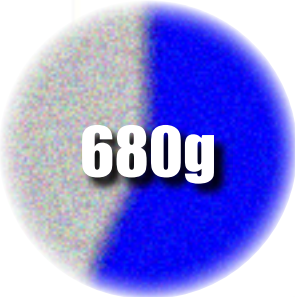
- Mamiya 7II ** (overkill)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)



An ideal ballhead for any medium format or lightweight large format camera. Incredibly smooth hydraulic locking mechanism. Available with various proprietary clamping mechanisms. Replacement clamps from Novoflex, RRS, Kirk, and Acratech should be able to be fitted to this model.

Ball locking adjustment
Tension adjustment not shown

Panning lock



Manfrotto, 490

Clamp type	Basic screw mount
Weight as shown	1040g (2lb 4.6oz)
Base diameter	78mm (3.09in)
Overall height	140mm (5.5in)
Ball size	50mm (2in)
Country of origin	Italy
Claimed Load Capacity	12kg (26.5lbs)
Clamp attachment	3/8"
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	2
Color	Black w/ black ball
Number of control knobs	3

\$182 US [retail]

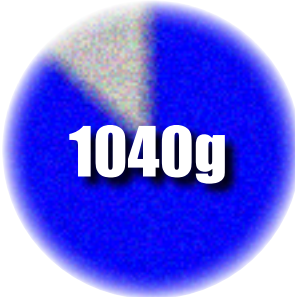
Appropriateness:

- Mamiya 7II (no)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)

A large, heavy-duty ballhead for all types of heavy medium or large format equipment. Available with various proprietary clamping mechanisms. Replacement clamps from Novoflex, RRS, Kirk, and Acratech should be able to be fitted to this model.

Ball locking adjustment

Ball tension adjustment



Panning lock



Ballheads

MAGNACHROM

Novoflex, MagicBall 50

Clamp type	Arca-Swiss style quick release
Weight with clamp*	725g (1lb 9.6oz)
Base diameter	44mm (1.73in)
Overall height	105mm (4.14in)
Ball size	50mm (1.97in)
Country of origin	Germany
Claimed Load Capacity	15.40 lb (6.99 kg)
Clamp attachment	1/4" thread
Tripod socket	3/8"
Independent panning	no
Number of drop notches	1
Color	Grey w/ blue ball
Number of control knobs	1

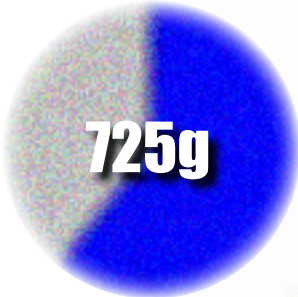
* excluding camera plate

\$459 US [retail]

Appropriateness:

- Mamiya 7II** (overkill)
- Mamiya RB67**** (ideal)
- Linhof TK45s (no)

An unusual design with an inverted ball, these high-quality MagicBall models from Novoflex offer facile speedy movements at the expense of weight and independent panning. Replacement clamps from Novoflex, RRS, Kirk, and Acratech can easily be fitted this model.



Novoflex, MagicBall

Clamp type	Arca-Swiss style quick release
Weight with clamp	1030g (2lbs 4.4oz)
Base diameter	54mm (2.12in)
Overall height	122mm (4.8in)
Ball size	60mm (2.36in)
Country of origin	Germany
Claimed Load Capacity	???
Clamp attachment	1/4" thread
Tripod socket	3/8"
Independent panning	no
Number of drop notches	1
Color	Grey w/ blue ball
Number of control knobs	1

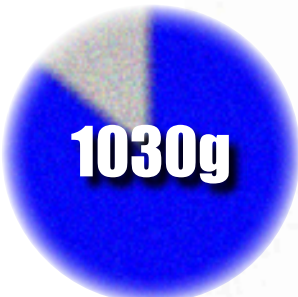
* excluding camera plate

\$559 US [retail]

Appropriateness:

- Mamiya 7II (no)
- Mamiya RB67**** (ideal)
- Linhof TK45s** (adequate)

An unusual design with an inverted ball, these high-quality MagicBall models from Novoflex offer facile speedy movements at the expense of weight and independent panning. Replacement clamps from Novoflex, RRS, Kirk, and Acratech can easily be fitted this model.



Ballheads

MAGNACHROM

Novoflex, Ball 40

Clamp type	Arca-Swiss style quick replacement
Weight with clamp*	575g (1lb 4.2oz)
Base diameter	60mm (2.05in)
Overall height	107mm (4.2in)
Ball size	40mm (1.57in)
Country of origin	Germany
Claimed Load Capacity	22 lbs (10 kg)
Clamp attachment	1/4" screw
Tripod socket	3/8"
Independent panning	no
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	1

* excluding camera plate

approx \$125 US [retail]

Appropriateness:

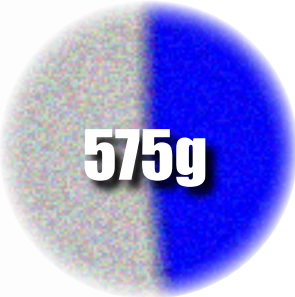
- Mamiya 7II *** (good)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)



A no-frills, all-around, universal ballhead for any medium format or lightweight large format application. A great performer, with light weight but still able to work effectively with bigger cameras. No independent panning. Instead, Novoflex offers a panning clamp as an accessory (as well as an accessory panning base). As such, Novoflex positions this ballhead as an integral part a complete "system" instead of attempting to fit every feature into one head. Accessory clamps from Novoflex, RRS, Kirk, and Acratech will work with this model.



Single control for all movements



Novoflex, Ball 30

Clamp type	Basic Clamp
Weight with clamp*	355g (12.6 oz)
Base diameter	41mm (1.61in)
Overall height	63mm (2.475in)
Ball size	30mm (1.18in)
Country of origin	Germany
Claimed Load Capacity	11 lbs (5 kg)
Clamp attachment	1/4 screw
Tripod socket	3/8"
Independent panning	no
Number of drop notches	1
Color	Black w/ black ball
Number of control knobs	1

* excluding camera plate

approx \$95 US [retail]

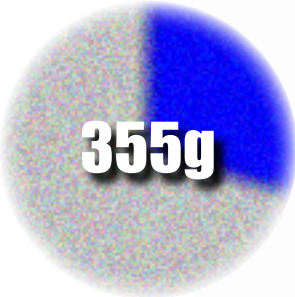
Appropriateness:

- Mamiya 7II **** (ideal)
- Mamiya RB67 *** (good)
- Linhof TK45s (no)

A no-frills, all-around ballhead for most medium format application. No independent panning. Instead, Novoflex offers a panning clamp as an accessory, which would unfortunately add significantly to this amazingly lightweight marvel. Accessory clamps from Novoflex, RRS, Kirk, and Acratech will work with this model.



Single control for all movements



Ballheads

MAGNACHROM

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Novoflex, ClassicBall 3

Clamp type	Q mount, Arca-Swiss compatible
Weight with clamp*	535g (1lb 2.8oz)
Base diameter	61mm (2.4in)
Overall height	106mm (4.17in)
Ball size	42mm (1.65in)
Country of origin	Germany
Claimed Load Capacity	15.5 lb (7 kg)
Clamp attachment	1/4" thread
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	3
Color	Grey w/ grey ball
Number of control knobs	2

* excluding camera plate

approx \$465 US [retail]

Appropriateness:

Mamiya 7II	*** (good)
Mamiya RB67	*** (good)
Linhof TK45s	(no)

A well-designed ballhead with plenty of features for pretty much any medium format application. Unique to the ClassicBall series are three drop notches facilitating ease of movement. Accessory clamps from Novoflex, RRS, Kirk, and Acratech can easily be fitted to model.



Novoflex, ClassicBall 5

Clamp type	Q base, Arca-Swiss compatible
Weight with clamp*	1140g (2lbs 8.2oz)
Base diameter	79mm (3.1in)
Overall height	110mm (4.3in)
Ball size	55mm (2.16")
Country of origin	Germany
Claimed Load Capacity	26.5 lb (12 kg)
Clamp attachment	1/4" thread
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	3
Color	Grey w/ grey ball
Number of control knobs	2

* excluding camera plate

approx \$585 US [retail]

Appropriateness:

Mamiya 7II	(no)
Mamiya RB67	**** (ideal)
Linhof TK45s	** (adequate)

A massive ballhead with plenty of features for pretty much any large format application. Unique to the ClassicBall series are three drop notches facilitating ease of movement. Accessory clamps from Novoflex, RRS, Kirk, and Acratech can easily be fitted to model.



Ballheads

MAGNACHROM

Really Right Stuff, BH-55 LR

Clamp type	Arca-Swiss compatible quick release
Weight with clamp*	895g (1lb, 15.4oz)
Base diameter	73mm (2.86in)
Overall height	94mm (3.72in)
Ball size	55mm (2.16")
Country of origin	USA
Claimed Load Capacity	23kg (50lbs)
Clamp attachment	1/4"
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	2
Color	Black w/ silver ball
Number of control knobs	3

* excluding camera plate

\$455 US [retail]

Appropriateness:

- Mamiya 7II * (overkill)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)

A full-featured, meticulously-machined, all-around ballhead for any medium format or large format application. Available for purchase with a wide range of optional clamps, including no clamp if desired.



Really Right Stuff, BH-40 LR

Clamp type	Arca-Swiss compatible quick release
Weight with clamp*	480g (1lb, 1oz)
Base diameter	53mm (2.08 in)
Overall height	78mm (3.07in)
Ball size	40mm (1.57in)
Country of origin	USA
Claimed Load Capacity	8kg (18lbs)
Clamp attachment	1/4"
Tripod socket	3/8"
Independent panning	yes
Number of drop notches	2
Color	Black w/ silver ball
Number of control knobs	3

* excluding camera plate

\$375 US [retail]

Appropriateness:

- Mamiya 7II *** (good)
- Mamiya RB67 **** (ideal)
- Linhof TK45s * (barely)

A full-featured, light weight, meticulously-machined, all-around ballhead for any medium format application. In a pinch can work reasonably well with lightweight large format equipment. Available for purchase with a wide range of optional clamps, including no clamp if desired.



Ballheads

MAGNACHROM

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Velbon, QHD-71Q

Clamp type	Proprietary Quick Release
Weight with clamp*	380g (13.4oz)
Base diameter	64mm (2.52in)
Overall height	101mm (4in)
Ball size	44mm (1.73in)
Country of origin	China
Claimed Load Capacity	13.2 lbs., (6.0 kg)
Clamp attachment	1/4" hex
Tripod socket	3/8"
Independent panning	no
Number of drop notches	2
Color	Black w/ black ball
Number of control knobs	1

* excluding camera plate

approx \$125 US [retail]

Appropriateness:

- Mamiya 7II **** (ideal)
- Mamiya RB67 **** (ideal)
- Linhof TK45s ** (adequate)



An incredibly light weight, inexpensive, no-frills, all-around ballhead for any medium format or lightweight large format application. Compared to many of the other ballheads in this review, the Velbon is fairly primitive from a machining point-of-view. Nor is it as "smooth" as some of the other ballheads, but the clamp really holds onto pretty much anything. No independent panning. Accessory clamps from Novoflex, RRS, Kirk, and Acratech should be able to be fitted to this model.



Single control for all movements



Velbon, QHD-61Q

Clamp type	Proprietary Quick Release
Weight with clamp*	255g (9.0oz)
Base diameter	52mm (2.07in)
Overall height	84mm (3.3in)
Ball size	36mm (1.42in)
Country of origin	China
Claimed Load Capacity	12.1 lbs., (5.5 kg)
Clamp attachment	1/4" hex
Tripod socket	3/8"
Independent panning	no
Number of drop notches	2
Color	Black w/ black ball
Number of control knobs	1

* excluding camera plate

approx \$110 US [retail]

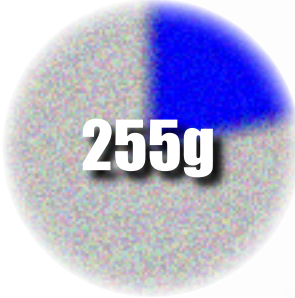
Appropriateness:

- Mamiya 7II **** (ideal)
- Mamiya RB67 * (barely)
- Linhof TK45s (no)

An incredibly light weight, inexpensive, no-frills, all-around ballhead for most medium format applications. Compared to many of the other ballheads in this review, the Velbon is fairly primitive from a machining point-of-view. Nor is it as "smooth" as some of the other ballheads. This would be a great monopod accessory. No independent panning. Accessory clamps from Novoflex, RRS, Kirk, and Acratech should be able to be fitted to this model.

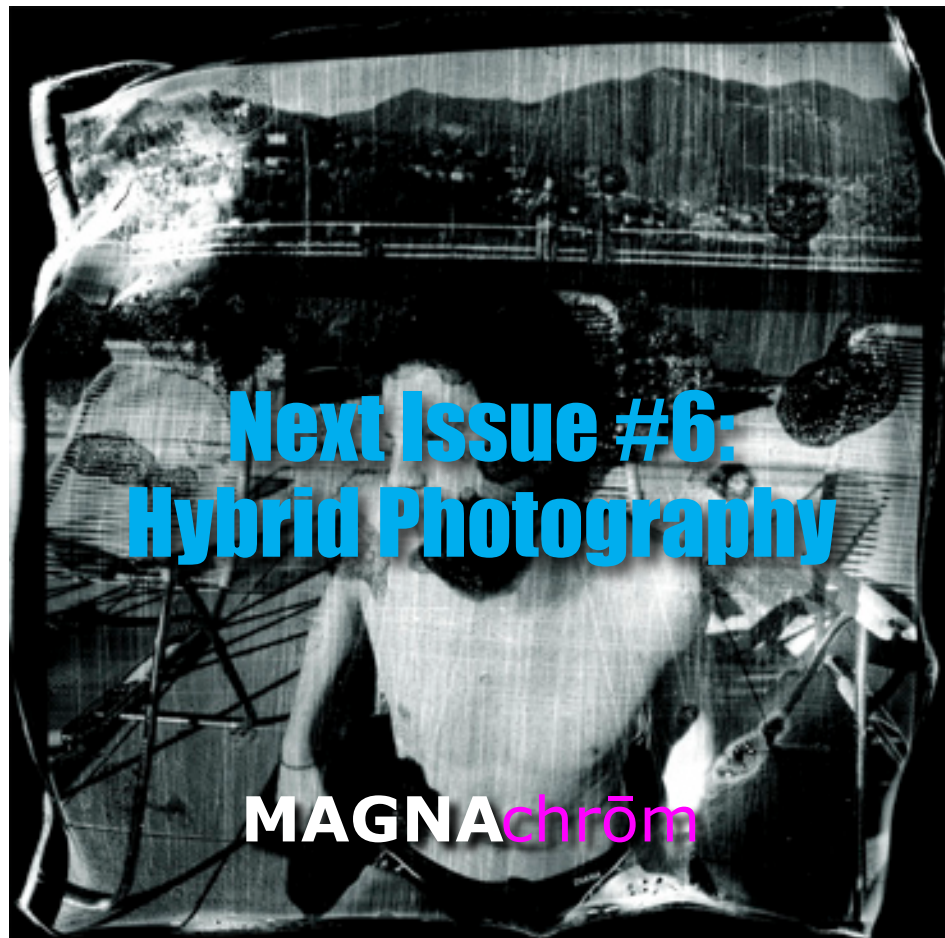


Single control for all movements



Ballheads

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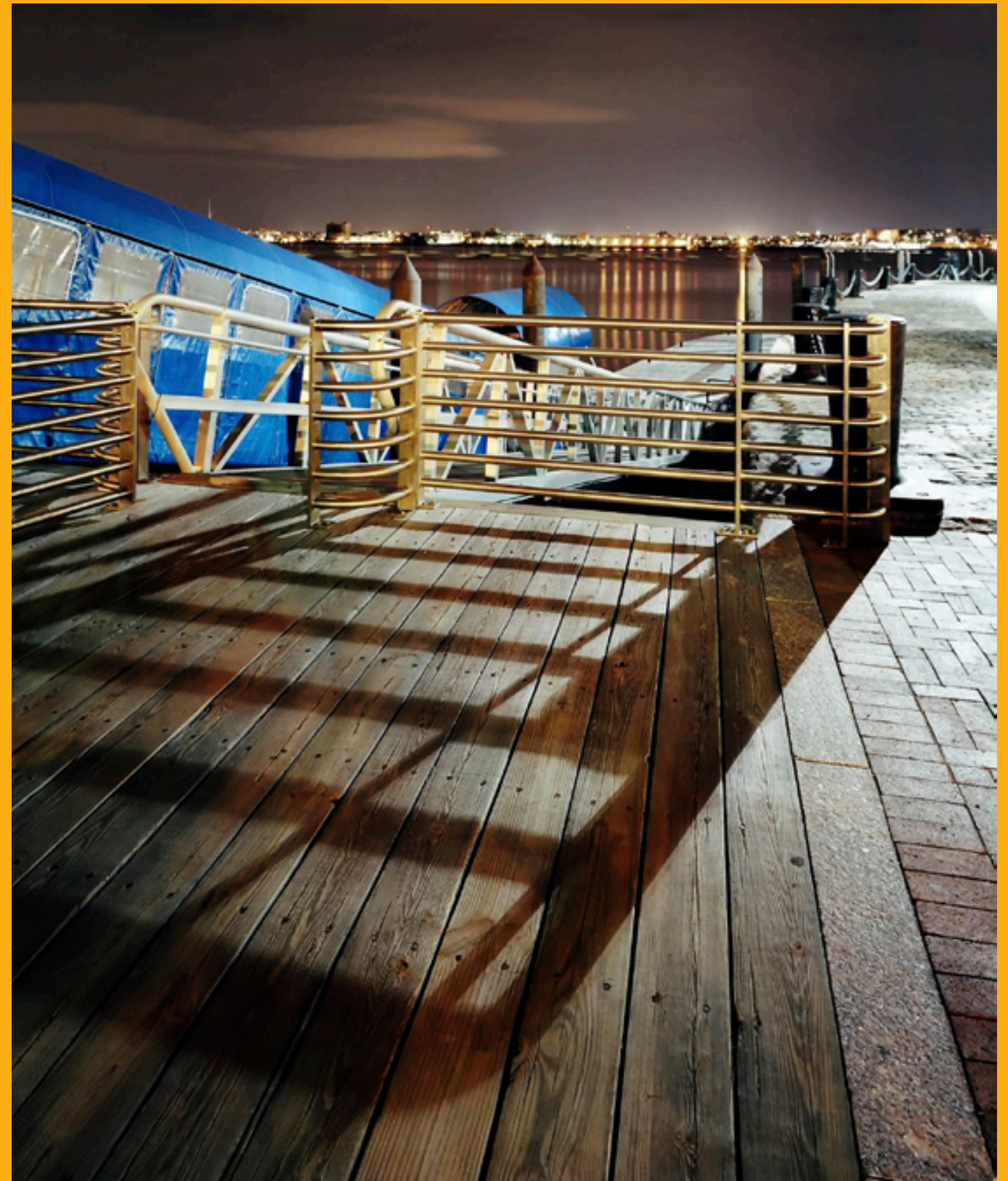
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MAGNAchrōm

[Parting Shot] Harbor Walk, Boston

As a member of the Boston Photography Center, at times we get together for both formal and ad-hoc photo shoots. A bunch of us got together on a cool spring evening a while back to shoot the South Boston waterfront. Here is one of my outtakes.

J Michael Sullivan



Location: Boston, Massachusetts
Camera: Mamiya 7II

Lens: 50mm
Film: Kodak Portra 400NC

Insight from our Readers

MAGNAchrōm

1.5

Thank you. I have downloaded the first 3 issues to my hard drive, and I have already had a chance to go through the first issue, which I found VERY impressive, not only in terms of content, but also layout, organization, and visual appeal. While I am 100% film oriented, I can understand and appreciate the digital articles too, which I also found to be very informative. Regards - *Dwane Jackett*

I just signed-up and am delighted to have "discovered" MAGNAchrom — thanks to your posts on the Large Format Photography Forum, which I also recently joined. The articles, photographs, reviews (and even the ads) are all excellent. I haven't had a publication get me this excited about large (and medium) format photography in a long time — and I've been playing with this stuff for almost 40 years.

Thanks again for an excellent publication. I wish you much success and hope to be enjoying MAGNAchrom for years to come. I will certainly do my best to support your advertisers, whenever possible.

—*Bill Gode*

First Impressions are great, this is just the web resource I've been waiting for. Its very hard to get any large format writing over here, virtually impossible to get copies of "View Camera", so something that combines large and medium format together on the web is fantastic.

Regards, *Paul Blacknell*

Brilliant! Absolutely brilliant! I have become an avid subscriber to your superbly crafted & beautifully designed magazine. Well done & carry on the great work.

Recently I bought the book on the Pakistan Karakoram by Shiro Shirahata. All of his truly incredible images were taken using a 4x5 Linhof Super Technika V & Fujichrome Professional RFP 50D. I was simply blown away by the razor sharpness & color rendition of large format photography. I realize too that I just have to learn this medium. The magazine you have produced has come at the right time! With the twain I hope to enter this realm of what is really true photography.

Congratulations & thank you very much.

Dilip Talekar