# Getting Started in Commercial Photography with John H. Siskin



If you'd like me to critique your assignment you can arrange that at my website. Please visit www.siskinphoto.com/workshop.php . I suppose you could also make a donation at the site.

## Lesson #3: Industrial Photography

Welcome to Week 3!

Happy Bulldozer
**© John H. Siskin**

I'm going to call this industrial photography, but I'm not really happy with the name. I have heard this work called annual report photography. And this approach is used for annual reports much of the time, but it is also used by business in many other situations. It might almost be called reporting, but there is a very clear point of view. Generally, this point of view is that your client is good and does good things.

The kind of photography I am talking about here is representing what the client does to new potential customers. Not only is this kind of work used for annual reports it is also used for facility brochures, you could use this method to promote a hotel or other destination. The approach is to use our images to tell a story about our client and what the client does. What makes this type of image really exciting to do is that you get to bring your creativity to the work on several different levels. Not only are you working out the usual lighting problems in a creative manner, but you also have a lot of opportunity to make creative choices about the way the image is laid out, because the client often doesn't have a detailed plan for the project.

This is probably my favorite sort of job. There are a couple of reasons for this, one reasons is that you get to do a lot of different sorts of works in just a few hours. I like working out a variety of shots against a short shooting schedule. Also the nature of the shot is different. If you shoot a portrait of a bank executive, the shot can usually be summarized as bank executive against background, but for a bank annual I might get to do a shot that would be about the bank executive and the bank client with the new facility the bank loaned money to build; this is a lot more fun. This literary aspect is generally the unifying theme of these sorts of a shot, they tell a story.

One more thing about this sort of work, you usually have to be quick. I have done a couple of facility brochures for a very small division of General

Motors. In a day I shot about ten set-ups, including several car shots on a test track and in a testing lab. That is a one-day job. If I got the job of shooting the new Cadillac I would take days to take one image of the car. Shooting the facility is more fun, but shooting the car shot is more profitable.

Test Cell at General Motors Test Facility
**© John H. Siskin**


So when you do this sort of work you want to be able to do a lot of different sorts of work, very quickly and very well. You need to have flexible gear and a very flexible approach to the work, and you need to be quick.

One thing I want to recommend particularly with this sort of work, although it would be helpful with everything we have discussed so far in class, is working tethered to the computer. This enables you to see the image on the monitor screen as you shoot it, which is the important part. You will make fewer mistakes if you look at the image on the monitor.

Also important you can discuss the shot with your client as you are designing and lighting the image. Since industrial images often evolve as you create them the ability to discuss the image with the client can save you from real problems after the shoot. Canon has software to do this packaged with their camera, but I understand it is hard to locate in the software package and not well documented. I have been told that Nikon charges extra for this software, which is regrettable. There are also wireless systems available for this, but unfortunately I don't have any firsthand experience with wireless systems.

I wanted to start with this image since it is rather similar to what we will be doing next week, with architectural images. One of the key differences is that this image was made in less than an hour on a job that combined several sorts of images.


Wolf Gordon Showroom
**© John H. Siskin**


Consequently certain compromises were made that I wouldn't generally accept on an architectural shot. One of the first things you might notice is that I used 3 bare bulb lights, one is covered by a juice bottle, we'll get to that later. I generally try to avoid bare bulbs in an architectural setting, because although they light omni-directionally the light is harsh, only slightly filled by bounce light. You can see why using the strobe tube for light without the reflector or an umbrella would be harsh. This is similar to the way an Omni Bounce or

the Gary Fong diffuser works, spreading light everywhere and hoping that bounce softens the light enough to be pleasing.

I just like these devices for on camera strobes, the bare bulb strobe works very well sometimes and not so well other times. The reason I used it in this shot is that it creates hard small reflections, as one might expect. These reflections are easier to deal with in Photoshop. With the long front window you can imagine that reflection was a problem. Also a problem was hiding a light on the left side of the shot. The light had to fit into the small area behind the short wall with the logo. This is where I used a plastic juice bottle I got from Trader Joes. This happens to fit on a Norman 200B with just a little tape. It makes the light source a little larger - the same way a frosted light bulb for home use is nicer than a clear bulb. I am always looking for ways to make my gear more effective, but I don't just look at photo retailers.

Diffusion Dome for a Norman 200B
**© John H. Siskin**

Norman 200B with Bare Bulb
**© John H. Siskin**

This is the way the lights were laid out.

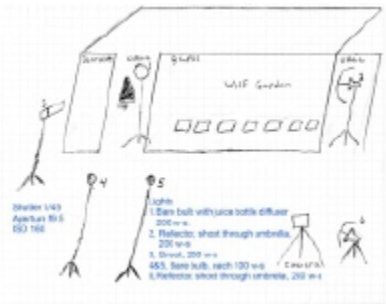


diagram for Wolf Gordon Shot
**© John H. Siskin**

I have two umbrellas in the shot. The one inside the store is a 60-inch umbrella, rather large. It softens and disperses the light very well. The light is bounced off the umbrella, which is how I normally use an umbrella. I placed it at the far right of the window; you'll notice that I had to remove the light stand in Photoshop. I had another 200B just to the right of the camera. I used one more 30-inch umbrella just to the right of the camera. This was set up as a shoot through umbrella; I use the smaller umbrellas as shoot through when my goal is more to disperse

light than diffuse light.

Finally, I have a 200B with a snoot lighting the logo on the wall. Norman doesn't make a snoot for the 200B that I know of. I picked up some black plastic pipe at Home Depot that works quite well for this situation. The one problem with this situation is that you do not have a modeling light to figure out where the snoot is pointed, so you need to be careful when you position the light and use the LCD or the laptop to check on placement of this light. It is always important to high light the logo material of the client.

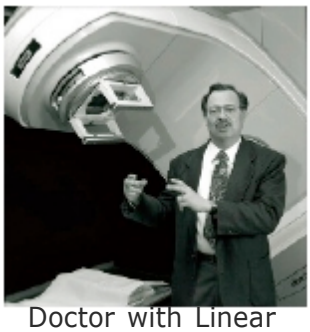
Snoot for 200B
**© John H. Siskin**

The most critical part of this job was dealing with all the glass. The glass reflects lights inside and outside. It also gives very little area to hide the light we need to make the image. Photoshop helped with this image also. I got rid of the light stands and the reflection on the glass from one or more of the bare bulb lights. You can see this in the unretouched image.

There are a few other highlights I got rid of, but I did two things I want to mention. I used the dodging tool to lighten the samples just behind the glass and I use the perspective cropping to clean up the perspective. Photoshop can be a great aid in shots like this.


Unretouched
**© John H. Siskin**


This is one of my favorite shots. It was done for a bank annual report. The story is simple: the doctor uses the machine behind him to treat cancer. It accelerates atomic particles, but that is not my concern. The machine is scheduled day and night, as one might imagine for



Doctor with Linear Accelerator


medical equipment. We had a 15-minute window to make the shot. This shot was done a few years ago, so I was shooting in medium format black and white with a film camera. I would have done the same thing today, but I needed more light at that time. I was using a Norman 4000 watt-second pack and one light; today I would have used a monolight.

I was working with a really good ad agency guy at the time so I let him keep the subject busy while I set up. Had the camera on the tripod and the strobe into a 60-inch umbrella in just a few minutes. The agency guy kept him busy while I guessed at the exposure and took a Polaroid. I put the film back on and I was ready to go. I asked the subject to tell me about what he did with the machine. He started gesturing and talking, I took 12 shots, thanked him and we got out of there.

I want to mention a few things about why this worked. First the subject was nervous, he didn't like having his picture taken and he was afraid we would run over time. This was why it was so important to have somebody keep him busy while I set up. Not only is speed important, but it is also important to keep the subject from thinking about how long it is taking. I heard a story about a bank president who started calculating what it was costing him to have his board of directors stand around and wait for the photographer to get ready. He announced what the number was and told the photographer to shoot now. The results were not pleasing.

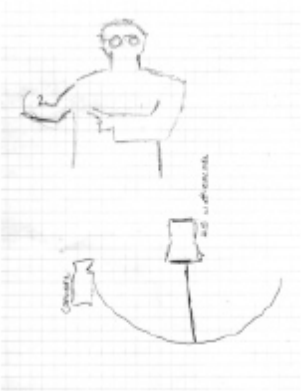


Diagram for Doctor with Linear Accelerator


I used a very large umbrella because umbrellas are quick and easy to set-up, much faster than soft boxes. Since it was such a large light source, the light was smooth and even, and I didn't need to worry if the subject moved.

Finally because I asked the subject to tell me about his work, he didn't have to worry about how to stand and what to do with his hands. He had a way of explaining what he had done before so he was comfortable. Finding a way to engage a subject is really important to a portrait, particularly a work portrait. I don't know if I could have done any better with more time, but there wasn't any more time. The key is to do the best work you can in the minutes you have and that takes practice.

General Contractor


This group of photographs is all about building houses. The photography is basically simple, at least compared to architectural subjects. It is important to express the complexity of making a house. One of the tools to do this is a wide-angle lens. The idea is to increase the drama of the shots. The key is to make a shot where the elements of the shot all work, so you have to willing to crop pretty heavily as in the next example.

The key is to budget for more post-production. In an hour on site, you may shoot over 300 images. This can mean more time in Photoshop then you spend on site where you shoot. In addition to looking for good design, you want to pay attention to the ideas the shot communicates: quality and attention to detail are generally important. This work can be a lot of fun. Here are a few more examples.

Gouging a Beam


Gouging a Beam, original crop


The key to doing good work in a construction site is to be alert for dramatic angles and how to get them. In this next shot I got a member of the crew to put me twenty feet in the air with a special forklift. Regular forklifts don't go this high.

These shots also work because I found a good angle.

Above Construction


Installing a Truss


Hammering a Truss


A couple of things about working at work: first it is your responsibility to say out of the way of moving equipment. You can't rely on operators to watch out for you. I like to shoot heavy equipment when it is moving away from me. First this is safer, and second you can get very close to the equipment when it isn't moving then get the right angle as the machine moves away.

If somebody tells you to wear a helmet do so, don't argue. If you need glasses, and do this sort of work, get a pair of prescription safety glasses. It is very difficult to use a camera with loaner safety glasses over your prescription glasses. There are several suppliers of prescription glasses on line, with prices for regular glasses starting at around $14. Here are a couple of other tools that can be useful on a construction site:

- a flashlight
- walkie-talkies if you are working with an assistant

Bulldozer 3

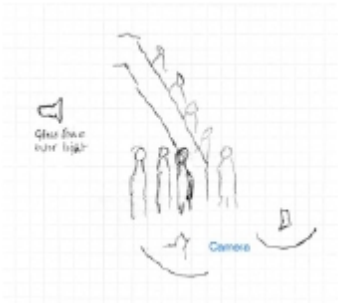

Shooting a Group


This shot is lot tougher to take and takes a lot longer to make. Groups are one of the toughest things to shoot. First you have to shoot a large area, which means a lot of lighting and second you have to make the image visually interesting. I like staircases for this work, not just in a factory, but also with bank directors.

In this case I did the shot with three Norman 200B strobes. I remember having difficulties getting everything to sync properly that day. I finally had to put the slaves on extension cords so that they were closer to the light I triggered with the wired sync.

I think everybody gets uncomfortable when a group of people is watching them have a bad time. Sometimes this will happen regardless of how prepared you are. It is important to avoid getting rattled; it only makes the situation worse. If you have a camera and lights out people will generally assume you are doing something difficult and be patient, unless it is a shot of a bank board of directors.

One of the other problems is getting a good shot of everyone at the same time. I don't have a magic wand for this, but I start by getting everyone's attention. So when I speak to the group I really try to project my voice. This is particularly important in a noisy factory.




diagram_group


When I have everyone's attention I tell the subjects where I want them to look, and what expression I want them to have. I

want them to look at the lens, and I tell them so. I tell them to smile but keep their mouths closed, this looks better than a grin in most business situations. Of course people don't always pay attention. One problem is that not everybody speaks English, and I can't communicate in any other language. I suspect it would be a good idea to have at least a phrase book that was designed for photography.

Glass Dome for Norman 200B


This shot used three strobes. The light near the center had a 60-inch umbrella. On the right side of the camera I have a Norman 200B; all the lights are 200Bs. A 45-inch ribless umbrella is mounted on the light on the right. This umbrella spreads light evenly over a large area. On the left of the camera I mounted a reflector with a glass dome. I used this instead of an umbrella because I didn't have room for an umbrella. The glass dome for Norman is a nice accessory; some of the other manufacturers have similar domes for their lights.

## Micro Work

Most of the time when people at BetterPhoto.com talk about macro or micro work they are talking about shots of flowers or bugs. But businesses need micro work in order to communicate information about the nature of their products.

In this shot, the product is a dye for concrete. You may never have noticed dyed concrete, but it has been important to my business. This particular product is designed for use in an automatic hopper that feeds dye into a really large machine that makes dyed concrete bricks. You can see that the individual grains of the dye are shaped like little doughnuts. It is this shape that is important to the company. These little doughnuts feed through the automatic hopper more easily than other types of concrete dye.

French coin with concrete dye

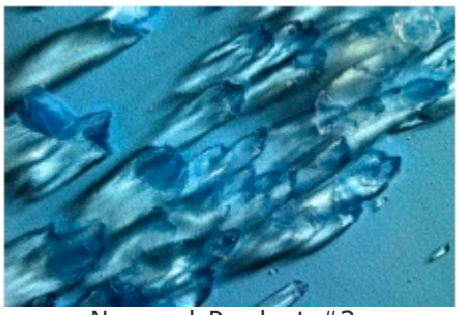

I used a coin in the shot to give the viewer an idea of the size of the grains. I used a proof penny for this shot since proof coins look better than regular coins. Proof coins are special coins that are made by the U.S. mint for

collectors; they are made to special standards. If you use regular change the coins look bad, which I don't want. In addition I made photographs of the dye with coins from other countries for the company to use in other countries. Concrete dye is used in many places.

Concrete with Bubbles

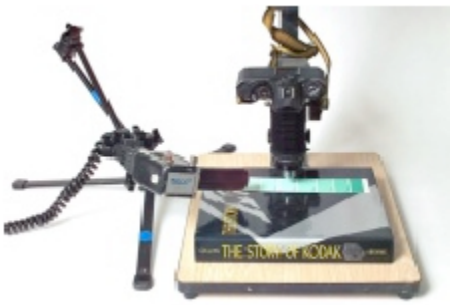

These shots were made with a large format camera for two reasons: first because the company might use them very large. The second reason is that the state of digital photography, at the time these images were made, meant that large format was the best choice. I used a special stand for micro and a Zeiss Luminar lens that is designed for large format micro work.

This shot and the next one were made with digital equipment. Digital is easier, especially if you work tethered to the computer.


Nanogel Product #2


The product in this shot is a sort of silica foam that is used to make panels that transmit light and the product has significant insulation qualities. The problem with photographing this stuff is that it is almost invisible. If you hold a little bit in your hand it appears almost ghostly. This was very difficult to shoot as a consequence of this transparency.

The camera was set up on a copy stand, these work well for this kind of work.


Micro Set-Up


I am substituting a shot of a film camera for my digital camera here, but you can see the other aspects of the set-up. The lens is a 4X microscope lens; you can get these inexpensively at Surplus Shed on line (www.surplusshed.com). You can also get one of the two adapters that make using the lens possible. This is the T-mount adapter for your camera. In addition to this you need an adapter that goes from microscope thread, this is a standard size, to T-mount. You can get

this at Edmund Optics (www.edmundoptics.com). You could get all three items here, but you would pay more. You need both adapters to get the microscope lens on the camera. You can see that I am using a bellows to place the lens further from the camera body. Extension tubes would also work well.

The background is a paint sample from Home Depot. The advantages of paint samples are that they don't have a dot pattern as something from a printer would. If you are working on a larger product you can output a nice background from your computer. In addition you can get a wide range of colors from Home Depot, or other supplier, and they are free.

The light source is a Norman 200B. I used a snoot with it to make the light more directional. This was a big part of what made the shot work. The snoot is made of black tubing I got in the plumbing department of Home depot. Part of what I hope you will retain from this lesson is that it isn't always about the money you spend but it is always about having a creative approach to problem solving. I also use various diffusers for micro work, but not with this product.

Another light source that works for micro work are tungsten bulbs, for instance an ECT bulb will make a nice source for soft light. You can get these bulbs for a few dollars from the large photo retailers. You may want look for a socket from Smith-Victor if you want to use tungsten bulbs. However in this case I needed a very small light source, which is why I used the snoot. The strobe is mounted on a Bogen Articulated Arm.

A macro lens from your camera manufacturer can be a good accessory for this kind of work. In addition extension tubes or a bellows unit is important. You can provide images that relatively few other people can provide. In addition to manufacturing businesses you may want to check out people with models and collectors as potential clients for this kind of business.

## Professionalism

This class has been about professional photography. There are plenty of reasons for a photographer to do these sorts of images for reasons other than money, but money is the reason most photographers do this kind of work. And that's fine. But professionalism is about much more than cashing the check. From the client's point of view, it is about having a reliable photographer who will do the job on time, on budget, and with the level of quality the client needs. In order for us to provide these services, we have to be sure our equipment will do the job. This means two things to me: maintenance and back-up.

When I come back from a location job, the first thing I do is start backing up the images. Eventually I will have a copy of everything I did for the client on

a DVD, but my first goal is to have the work on the computer hard drive and on an external drive. If I have it in two places, I am unlikely to lose it. Then I will clear off my flash cards, so I am ready for the next job. I try to copy the flash cards to the laptop before I leave the location. If I am working tethered to the computer I will usually shoot a copy of the last image to the flash card in the camera, before I move to the next shot. You may feel that such redundancy is unnecessary, but it doesn't take much time and it may keep you from losing a job.

As soon as I have the computer copying the files, I start charging the batteries, strobe and camera. By this time, I have been back from the shoot for a few minutes; but there is one more thing to do before I kick back and relax.

Any equipment that performed questionably at the shoot is removed from the cases so that I will remember to check it. Since I have a lot of equipment, and much of it is far from new, I often have to check gear after a shoot. I probably won't check the problem gear immediately, but this way I won't forget. Every 5 or 6 jobs, I check each piece of gear in the location cases to make sure it works. I have done jobs where there were major malfunctions and it isn't fun. Checking doesn't take much time and it may save you from losing a client.

I also have extra equipment to save me from a crisis. I shot a wedding a few years ago that illustrates the kind of problems you can have: by the end of the day, 2 cameras, 2 lenses and a strobe unit had malfunctioned. Fortunately, I had enough equipment that the bride and groom never noticed that I was having problems, but it made me horribly upset. I haven't shot a wedding since. I repair problems with gear as soon as practical, after all my business, reputation and my photographs rely on my equipment. This does bring up one more kind of back-up: it is always good to have a little more gear than you think you'll need, the unexpected is often just around the corner.

Another business-related issue is what to give to the client. I want to make clear here that I am not talking about weddings or event photography, but the kinds of things we have discussed in this class. In most cases, I give the client a CD or DVD with two sets of files: first a set of the best images that have had whatever post processing work that was appropriate done. I give another set of JPEG images of everything that is not embarrassing from the shoot. I provide this second set of images because the client will often see something in those images that they can use. Of course, they know more about their industries than I do. For instance, in the images of the construction project I showed above, I gave the client about 25 selected images each week and about 100 of the second set of JPEG images. Generally, the first set of selected images are JPEG images, but if the client requests a TIFF or another sort of image I will provide it.

## Your Assignment: Photograph People at Work

Shoot images of people at work. I would like to see shots that really explain what people are doing. Tell a story. If you can do a shot that features somebody's hands working that would be good. Upload between 3 and 5 images. Please try to make images of your set-up, and please send those also. The shots for this assignment are more like shooting an event than shooting a business portrait.

Have a good time.

Thanks!

John
If you'd like me to critique your assignment you can arrange that at my website. Please visit www.siskinphoto.com/workshop.php . I suppose you could also make a donation at the site.