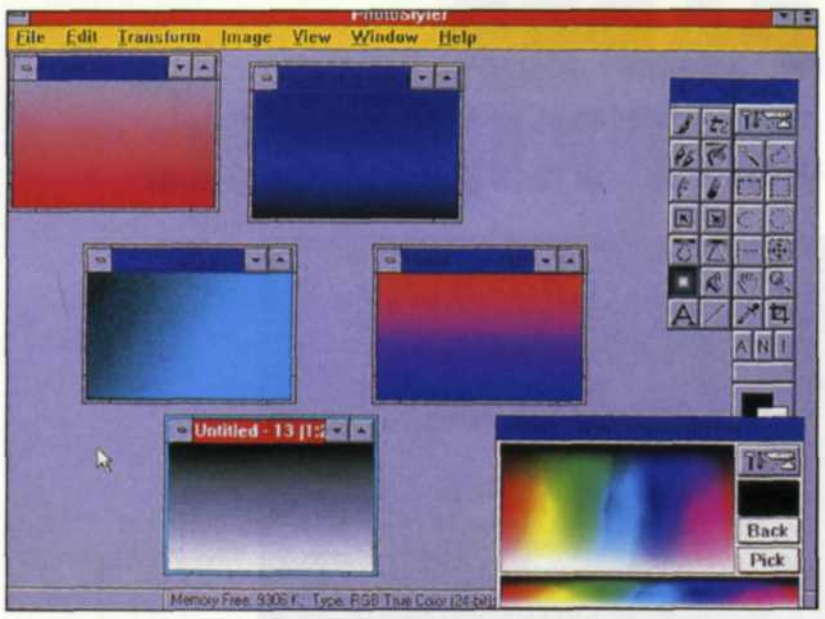
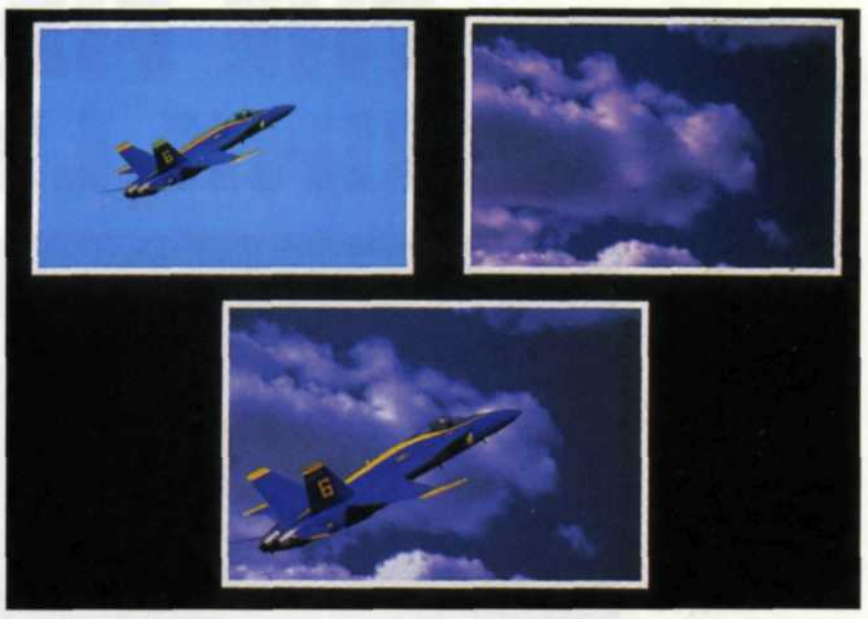
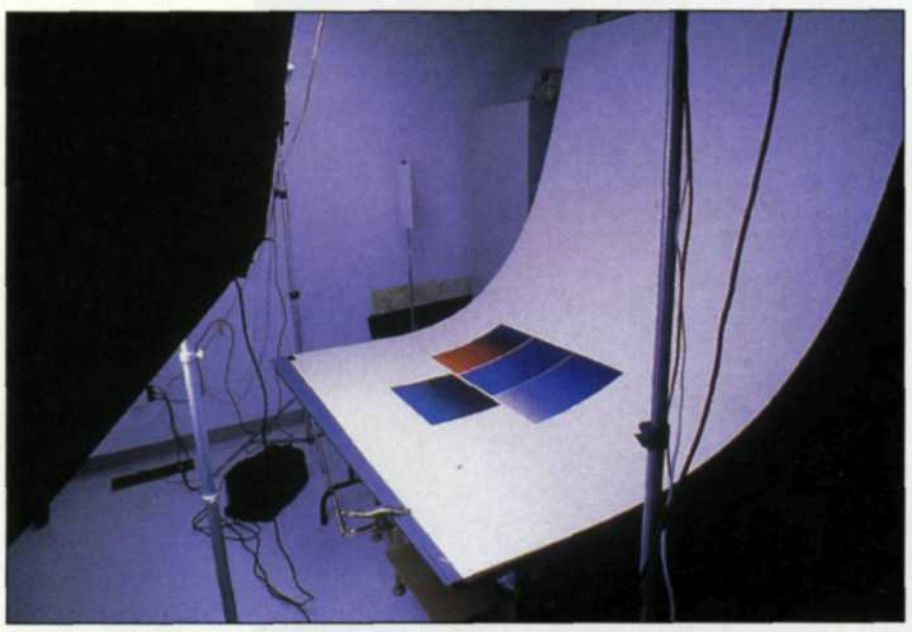
DIGITAL DIRECTIONS



Creation of graduated backgrounds in graphics packages.

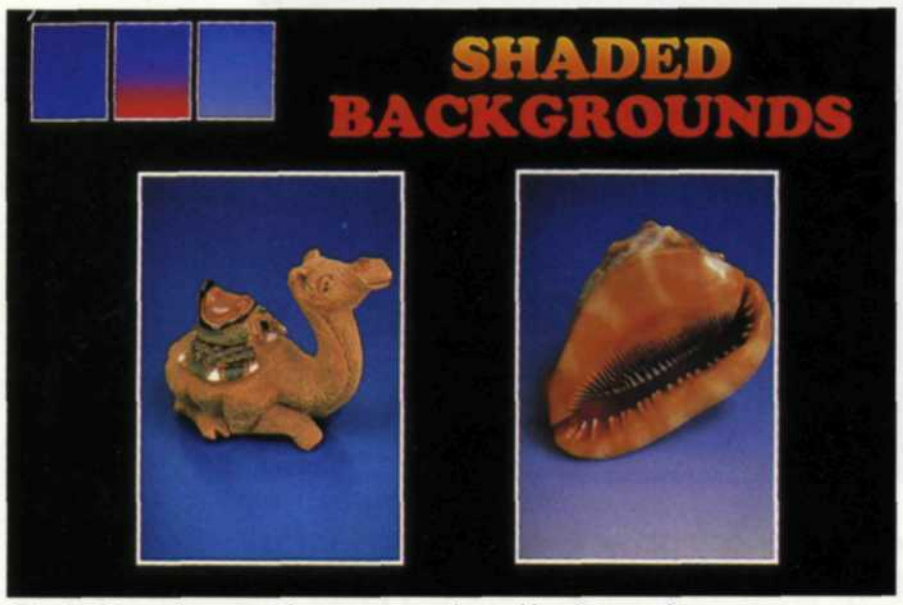


Background image of clouds, jet and composite image.



Graduated paper backgrounds in studio.

This screen shot shows the border selection process.



Final tabletop image using paper graduated backgrounds.

Digital

SUCCESSFUL DIGITAL photography in the photo lab today depends on offering new services. Providing just the basic services may not be enough to support digital photography. If you look closely at the type of work your clients perform, you may be able to add special digital services to enhance their work and increase income to your business. Digital backgrounds offer commercial photographers variety in background choices as well as the answer to salvaging those problem photo session.

The first type of digital background is for use before a photo is taken and usually applies to small product photography. When the client needs the background to be graduated in color and yet have the small product fully lit, the photographer can quickly become frustrated trying to perform magic tricks. The solution, of course, is your traditional and digital photo lab. Using a graphics program that has a blending function, you merely create a unique graduated background

Original shot of ice sculpture.

The background makes the shot!

Backgrounds

Jack and Sue Drafahl

file in your computer system and print the file on photographic paper.

Let us suppose that a client wants a 16x20" color sweep background that goes from blue to black. Load your computer with a program that allows blends inside shapes. Draw a rectangle that has the same proportions as the final print and stretch it to fit the output page size. Select the blend function and assign the top of the rectangle to black, and then assign blue to the bottom of the rectangle and set the blend steps to at least 125. If you are creating a blend from one color to another, set the blend steps to at least 200 to achieve a smooth gradation. Some programs do not have this control, so trial and error may be necessary.

Save the file, and send the image to a film recorder loaded with color negative film. When printing the negative on color paper, use matte paper, as the glossy will create reflection problems in the studio. After you have aligned the image in the enlarger, turn the focus slightly out-of-focus so that the grain and dust spots will not show in the final print.

If the client has specific Pantone color needs in the background, most computer programs now have these colors listed. When using Pantone colors in your blend, you should also make a gray scale image so that color balance in the darkroom is easier.

Another popular type of photo background are those with the feel of texture such as marble, wood, slate and cloth. You can use your flatbed scanner to scan in a variety of flat materials such as carpet, tile, Formica, cloth, or wood. The flat lighting of the scanner evenly lights the subject and is much faster than setting up and lighting the materials in the studio. These texture files can then be imaged and printed on color paper for use as backgrounds in the photo studio.

The second use for digital backgrounds comes into effect after the photo is taken. In this scenario, circumstances are such that the photographer does not have a

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Digital Backgrounds

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suitable background behind the subject. The photographer takes the image anyway and expects you to pull a rabbit out of your hat and fix the background. You would simply scan in the image, select the subject away from the background, and replace it with a new background. Sounds simple enough, right?

In most cases, the cluttered background is replaced with one that graduates from one color to black. If the background is all one similar color, start by selecting the background with the "magic wand" tool, which selects similar colors in the background. If the backgrounds contain many variations of color, you will have to use the manual select tool to trace the edges of the subject and background. This may sound like a lengthy task, but in most cases a 30 to 50 megabyte file will only take 10-15 minutes to trace manually.

Once the background is selected, you would then replace it with a new one that is created with the "graduated" tool or an image that has been loaded into the clipboard. Before you de-select the background, select the "border" tool and set it to 3 pixels wide. Then select the "average" tool and use a 2-4 pixel average on the border. When you activate this function, the computer will calculate the data between the foreground subject and the new background and make a pleasing blend. Save out the file and send the image to a film recorder or digital color printer.

You may think that this scenario is not very common, but read on as we show you some examples of how these digital backgrounds have helped our imaging business.

With our business, we see both sides of a project. We have a full processing lab, both traditional and digital, and we also do commercial photo location sessions for our clients. In one situation a client needed a photo of a very large piece of electronic equipment that was located right in the middle of a work area. The equipment was massive and could not be moved, and vast amounts of electrical cords protruded from the back of the system. In previous sessions with other photographers, they had allowed a full day for the photographer to set up backgrounds, get the lighting, shoot Polaroids, and photograph the final images.

In our case, the client only had the piece of equipment in the building for one day and the engineers were running

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Digital Backgrounds

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tests on it all day. The only time available for photos was during the hour lunch break. We arrived 30 minutes before the break so we would be ready to set up the lights and camera as soon as the engineers exited. The background was of no concern. We only had time to see that the equipment was framed, focused, and was uniformly lit. We were only able to knock off a dozen shots before the engineers returned.

Upon return to the lab, we processed the 4x5s, had one scanned with a 4x5 Leaf scanner and loaded the image into our computer. Using the "manual select" tool we outlined the machinery and "inverse selected" the background and dropped in a new background that was graduated from blue to black. We used the "border" and "average" tools to smoothly blend the subject and background. The final image was then exported and imaged to 4x5 film on our film recorder. Color prints were then made in the lab and were displayed at trade shows and used in brochures. We estimated the cost of the digital background verses the full day shoot to be comparable. The difference is the engineers were able to work on the equipment all day.

In another case, we had to create an image of a Nikonos V camera system with three different variations on a blue graduated background. The problem was twofold: we had only one camera system to use, and the camera's black surface picked up the reflections of the blue colors. The photo solution was to shoot a single system in three different poses on a white background. Each image was scanned into the computer system, and a composite image was created. The background was then selected and the blue graduation was inserted.

Our last example is really one for the books. As we were just packing up our gear from a photo session for a resort, the manager came out and asked us if we could quickly photograph an ice sculpture. It weighed several hundred pounds, and it was melting as we spoke. There was no time for fancy lighting or setting up a background, so we set up two 45-degree lights, a camera on a tripod, and took a half dozen shots before they whisked the sculpture off to the banquet table. The images were processed in our lab, scanned into the computer, and edited, dropping in several new backgrounds.

The key to a profitable digital photo lab is understanding its unlimited potential. Both your lab personnel and your clients need to see just what can be done. This is best accomplished with examples. Making samples shows everybody what you can do. It will also let you know if you are biting off more than you can chew.

We have shown you how to add digital backgrounds to your repertoire of electronic magic tricks. Go and give it a try and find one more way to make the digital photo lab work for you and your clients.

Jack and Sue Drafahl own and operate a custom lab in Portland, OR. They are also professional photographers, specializing in underwater photography.