









Films used to make blue and white slides.

# **SR-71A BLACKBIRD**

Polaroid PolaBlue



# Photo

Editor's Note: Sue and Jack Drafahl operate a full-service commercial photo lab just outside Portland, Oregon. Services include aerial photography, studio and location photography, audio visual productions, computer graphics and stock photography. They are contributing editors to Skin Diver Magazine and Petersen's Photographic, and specialize in photo lab procedures, as well as film and equipment testing on land and underwater.

IN ORDER FOR a photo lab to be successful, the lab manager must be constantly on the lookout for new and profitable services to offer.





# b Blues

Professionals today are often being asked to lecture or speak in support of their company or product. The demand for speaker support materials is increasing at a phenomenal rate. Speaker support slides may include: color copies from books, computer generated graphics, X-ray copy slides, or special types of lecture slides called "blue and white" slides.

#### What Are Blue and White Slides?

These slides consist of a solid blue background with the text in white letters. These "blues" are made from black copy or text printed on white paper, then converted in the photo lab to "blue and white" slides. JULY • 1991

This type of lecture slide is commonplace in the medical and electronic lecture circuit and has become a standard in many large companies. When your lecturing client has a limited budget and short turnaround time, but still wants the best quality possible, blue and whites are probably your best bet.

Blue and white slides can be made in a variety of ways, using different films, equipment and procedures. With the relative cost to the client small, and the profit margin to the lab high, blue and white slides are definitely worth a try. The equipment required is minimal, and the technical expertise required to make such a slide can be taught in a few hours.

# Sue and Jack Drafahl

### Why Blue and White Slides?

The blue and white slide was originally developed by the medical community as an inexpensive method for relaying data to other doctors in medical briefings. They found that the blue background was the most pleasing color to the eye, while creating contrast between the text and the background. Through medical testing, they also found that many people had trouble seeing the color red, and that red tended to make the viewer more uncomfortable. Green, on the other hand, was a more comfortable color but seemed to lack the contrast needed to separate the text from the back-

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ground. Black backgrounds with white titles provide too much contrast to the slide, making it difficult for people to read the fine print on complex slides.

## Method 1: Polaroid PolaBlue Film

The Polaroid Corporation, well known for a variety of instant film processes, recognized the need for fast and economical lecture slides, and developed a special film called "PolaBlue." Equipment required for this process includes: a sturdy copy stand with a 35mm SLR camera; two copy lights; Polaroid PolaBlue 35mm instant film; and, Polaroid's manual or auto processor.

The procedure for making Pola-Blues is as follows:

1. The customer presents you with a clean black and white copy of the desired lecture slide. The text/copy should be made with a carbon typewriter ribbon or on a laser printer. 2. Load the camera with the PolaBlue film and place the black and white artwork on the copy stand.

3. Turn on copy lights and make exposures based on the data sheet and exposure tests made prior to offering this service.

 Process the film in the manual or automatic Polaroid film processor.
Mount the slide and deliver it

to your happy client.

Because this process requires one film and is an instant process, you could offer it as part of a one-hour service, or at least as part of your rush service. To test the film, we recommend starting at a 1 second exposure using an f/stop that is one or two stops down on the lens. Tests should include different image sizes to accommodate any size art that the client may provide. The client should be warned that correction fluid, tape lines, and anything other than black copy on white paper might show on the final slide. Speed and turnaround is the key advantage to this process.

The disadvantage to PolaBlue is

that the film only comes in 12 exposure rolls, the exposure is critical, the film is grainy and very susceptible to any uneven lighting.

### Method 2: Kodak Vericolor Slide Film 5072

Kodak makes a special film used for creating slides from color negatives. This C-41 process film also has applications for making blue and white lecture slides. Equipment required for this process includes: a 35mm copy stand; copy lights; Kodak Vericolor 5072 slide film; color correction filters; and, the lab's ability to process C-41 films. Kodak makes this film in 36 exposure rolls, 100 ft. bulk loads, and large formats such as 4x5 and 8x10.

Preliminary tests for exposure and color balance should be run before you start selling this service. We found that a 1 second exposure at f/4.5 with 70cc magenta and a -15 yellow filter gave acceptable results when using two 250 watt copy bulbs.

The procedure for making these PHOTO LAB MANAGEMENT

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text on a black background.

3. Mount the Kodalith in a slide mount. We know that this is an added cost, but for quick alignment on the slide duplicator it is a tremendous time saver. You end up with a master to file away for future blues.

4. Retouch with your Sharpie pen any unwanted marks, cutlines, etc.

#### **Exposing the Dupe Film**

1. Load a roll of Kodak 5071 Slide Duplicating film or Fuji slide duplicating film into a slide duplicating machine.

2. If you have a double exposing camera, you would set the camera to double exposure and make one exposure of the white light through a deep blue filter (Kodak 47 blue works very well.)

3. Next, you would mount the Kodalith copy slide on the duper substage and make a second exposure with the blue filter removed. 4. Process the film in the E-6

4. Process the film in the E-o process.

5. Mount the slide and deliver to the customer.

If you do not have a double exposing camera, a second method can be used to make the blue exposure. Mount the blue filter to the front of a small electronic flash or one that has a variable power control (a guide number of 4-8 works best). If your small flash is too powerful, you can block part of the flash head off to cut down the amount of illumination.

In the darkroom, take a piece of masking tape and attach a roll of dupe film to the wall with the emulsion facing out. Turn the lights off, pull the film out to full length, and secure the cassette to the wall with tape so it doesn't twist. With your back at the opposite end of the room, fire the blue filtered flash once. Carefully rewind the film back into the cassette and you are ready to make the white exposure.

Make sure you mark these blue exposed rolls so that you don't accidently use them as standard dupe film. We use this method to make our blue exposures, but we generally expose 3-5 rolls at a time. Load the blue exposed roll into the slide duper and place the Kodalith copy slide on the base of the duper. Make one exposure and you have a very high quality blue and white slide.

The advantage to this process is its ability to clean up small marks on the original copy. The quality of this process and consistency is also the highest of the three. The whites are very clean and the blue backgrounds are very smooth.

This method also handles the finest of fineline copy with ease. Another advantage of the pre-flash method is in the blue coverage. With all other methods the blue exposure is in the image area only. It is possible that if the film chip slips in the mount the edge of the blue will show. If you use the pre-flash method, the entire film from edge to edge will be blue exposed. If the film moves in the slide mount there will still be blue showing.

The disadvantage of course is the time and expense of making a blue and white slide using this method. This process is definitely not a onehour candidate, but it still can be considered for rush services.

#### **Blue and White Tips**

The secret in making good blue and white slides is understanding (Continued on page 36)

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the limitations of each method, and educating your clients on how to prepare artwork for your specific process. We suggest that you make the following recommendations to your clients:

1. Use one piece of paper for each slide.

2. Make each piece of art as large as possible on the 8½x11 sheet of paper.

3. Leave about 1-2 inches of empty space to the sides, top and bottom of the sheet so the cameraman can crop to the proper format.

4. Use a carbon ribbon on your typewritter whenever possible, or a laserprinter with typeset-quality fonts.

5. Remember—the better the original the better the blue.

6. If you have decided to use one of the first two processes and your client brings in artwork with cutlines, corrections or tape showing, place the artwork on a good copy machine and make a new original.

## **Pricing and Turnaround Times**

Pricing of these slides will vary from lab to lab, depending on overhead and demand in your local area. We suggest that you do some cost analysis, price comparison, and marketing before you set your prices. We have found prices from \$5 to \$10 per slide depending on location and the structure of the business.

Turnaround times will depend on the process you select and the type of clients you have. If you have a lot of procrastinators, you may want to have two processes. The PolaBlue would be for those who need it yesterday and understand that the rush will cost them some quality. You could then use the longer process for clients who plan in advance and are willing to wait the 3-4 days that most labs have on this kind of work.

Lecturing with slides is big business worldwide and involves some very lucrative work for photo labs. With very little investment in equipment, a few hours of testing, and minimal man hours, your photo lab blues could make your lab plenty of "greens."