#### Issue #14- JQ9702

#### User Profile: Richard Newman

I believe in the beauty and power of photography to express an idea or emotion. I believe it is the responsibility of the artist to look for that beauty and emotion and translate it to the photographic image. I am committed to my passion and to the creative photographic process.

I began photographing in 1980 after moving to California from South Dakota. In 1984, I began working with a large format camera to teach myself some discipline and allow myself to view the image as a completed form. While at a John Sexton (see User Profile in JQ9403) printing workshop in 1986, I met Rod Dresser (see User Profile in JQ9701) of the Ansel Adams Publishing Rights Trust. That summer I began working with Rod on defining my vision and also as an apprentice.

I decided on commercial photography as a full time profession in 1988, with clients including TWA, Struder Revox of America, and Audio Kinetics. In March of 1989, I was deeply affected by the Exxon Valdez grounding and left a personal assignment to see what really was happening there. When I returned from my first of 5 trips to Prince William Sound, I made a commitment to photography as a statement of my beliefs instead of a livelihood.

My work has appeared in *The Village Voice, Rangefinder, America's Third Deficit, Earth Island Journal, American Oceans Campaign, LA Weekly, The Book- Los Angeles, and The Amicus Journal.* I wrote and produced a video *"Footprint On The Water"* with Val Kilmer and Jo Ann Whalley Kilmer, and contributed to the documentary, *"Hard Aground"*, produced by the State of Alaska.

Two catalogs of my work have been published, both with writings and photographs and my work is in private collections as well as the White House Archives in Washington, DC. I have exhibited widely since 1988 (24 one man exhibits and 10 group shows) and am published in 3 books(*Best of Photography Annual 1986, LA Nude* available in Japanese and English, and *The Exxon Valdez Oil Spill-Final Report*).

In 1992 I went to work for Calumet Photographic. In 1995 I accepted the position of Marketing Specialist to the Fine Art Market. I am directly responsible for achieving Calumet's goal of furthering our position in the Fine Art market. I am also the editor of the "Newsletter for the Photographic Artist", a quarterly publication from Calumet that addresses new ideas and view points in the field of fine art photography... My position is an exciting one that lets me work directly with the most creative and exciting photographers in this field.

I am currently working on 2 bodies of work, a series of editioned, photographs made on the California coast, and a documentation of the American West after the interstate system of highways was built. Besides my full time position with Calumet, I have led workshops throughout the southwest and the California coast sponsored by Hasselblad and Ilford.

My personal work is represented by Swanstock stock agency, Tucson Arizona.

I evolved into photography because I was a frustrated painter. As I was growing up I spent two years of my visual education at the Art Institute of Chicago, in the Monet "haystack" room. I remember thinking that I would never be able to paint like that. It has always been very important to me that my visual communication be very personal and individual. Photography became my visual outlet. I was impressed with the masters (Stieglitz, Weston, White, and Evans), and made their work the basis for my photographic education. As I progressed as a photographer, I began to understand how I wanted my language of retinal communication to look, and now I just needed to figure out the process of juxtaposing my ideas to film.

I began looking for repeatable results and a JOBO processor became the only answer. Because so much of what I try to do photographically relates to what I see and feel, it is imperative that I be able to obtain repeatable, predictable results. I do not have a lot of room in my darkroom, so the size of the processor became a consideration as well. I chose a CPE-2 Plus for my processor and have never regretted that decision. I work mostly with Hasselblad and Leica cameras so this machine and 1500 series tanks are the perfect match for what I do. I photograph a lot of static objects, so evenness of development is crucial. In smaller formats, the better the negative, the better the final print.

As I began to become familiar with my CPE-2, I realized that the control I had would now allow me to produce better negatives and a better translation of what I was trying to communicate... Ah, more tonal scale in a smaller format negative, how could that be? By diluting my developers (Ilford's ID11, or Perceptol) and extending my times I was able to reproduce the same type of negative every time. On a technical note here: I use Ilford's HP5+ and PanF+. HP5+ is developed in ID11 for 7.5 minutes @ 75 degrees @ a dilution of 1:1, that formula applies for both 35mm and roll film. I use HP5+ for almost all of my work. When I have an extremely flat subject matter, I use Pan F+ in roll film and Perceptol @ 75 degrees, 1:1 for 10.5 minutes. I remember early in my career I once sold my entire 35mm system because I couldn't load those stupid, cheap stainless steel reels. The first time I loaded a 1501 JOBO reel I knew it was time to look for a new 35mm system.

When I lived in southern California our ground water temperature often times in the summer would not go below 75 degrees. I began to adjust my processing times and dilutions so that I could obtain the same results year round. Now that I live in Northern California where the ground temperature seldom changes, I have maintained more consistent working times and temperatures.

Chemistry usage and disposal is very important to me also. The smaller the quantity of chemistry I use, the less ends up in the Pacific Ocean near my home. With my CPE-2 Plus and its rotary system, I am able to develop 6 rolls of 120 HP5+ with as little as 300ml of developer. Even in a JOBO tank system, by the inversion method, I would still use 1000ml of chemistry. The lift on the CPE-2 Plus allows me to reuse my fixer several times also. The less chemistry I use, the less my silver recovery unit has to work, and the happier and healthier are all those fish and birds.

When I am experimenting with a new idea, I photograph early in the morning, then travel home and develop my film. This process of working allows me to see if my idea is valid while the original impression is still fresh in my mind. Often times if the conditions are right, I will return to the same location later in the day or the next morning and repeat the photograph until I can reproduce what I originally "saw".

I also find my CPE-2 Plus to be a great tool during workshops in helping students understand basic exposure and lighting conditions, and how they relate to film. In a workshop environment, students are able to see a negative they have composed and exposed an hour before. This ability greatly helps with their own visualization process. The workshops I teach now are becoming less involved in the "mechanical" aspects of photography and more directed toward seeing. This

processor becomes an invisible tool in that process, allowing me more freedom in composition and exposure, because I know exactly how the film will respond every time.

Follow your passion, express your ideas and emotions through the beauty and the power of photography. There is an artist inside of each of us.

Richards personal work is represented by Swanstock stock agency, Tucson Arizona.

## Affordable Digital Dye-Sub Printers

#### Manufactured by Fargo Electronics.

By Joe Hall

JOBO Fototechnic, Inc. was recently named a Fargo distributor specializing in the Photographic Industry. This decision was based on the fact that many of our customers are experimenting with digital output, and for the money, Fargo Electronics offers the best price/performance ratio. Will digital Photography ever<u>completely</u> replace traditional silver halide photography? We don't think so, but there are times when the output required for pre-press applications warrants the ease and speed of a digital solution.

If you look into digital printers, you'll notice there are a variety of different machines. They range from dye-sublimation types (i.e. Fargo, Kodak, etc...), to inkjet types (i.e. Epson, HP, etc...), to very large sizes (i.e. SignTech, Encad, etc...). Each of these printers offer advantages and disadvantages over the others, and ultimately, the best way to decide on a specific printer comes down to what you will expect from it. "Large-format printers are not designed to give high-quality output for viewing up close. While the prints look good from a distance, they would not hold up to close-range scrutiny because it's not what they were designed for.

Inkjet printers are a low-cost method of producing prints that are acceptable to some. They are grainier than dye-sublimation printers and don't approach the continuous tones achieved by a true photographic print. Also, the water-soluble inks used by inkjet printers leaves the prints susceptible to damage from moisture.

Dye-sublimation printers on the other hand use a unique method of adhering the dyes to the emulsion of the paper (see the explanation of the process at the end of this article). While no digital printer yields true photographic quality yet, the dye-sublimation process is the closest thing to it." We're confident the Fargo printers are the best for the money, so JOBO Fototechnic, Inc. is proud to link our positive reputation in the photographic industry, with Fargo.

There are three page-style printers in the Fargo product line you will want to consider if you're looking into digital printing.

#### FotoFUN!

The FotoFUN! is the most affordable page printer in the Fargo product line. It's designed to make dye-sub prints from Photo CDs, scanned photos, and Internet pictures (if the Internet pictures were dumped down to 72 dpi, no printer is going to make them look good). The maximum print

size of the FotoFUN! is 4x6" and is perfect for customized postcards, holiday greetings, special announcements, or party souvenirs. You can even use it to make custom coffee mugs! Every print you make with the FotoFUN! can be printed with a UV coating to extend the print life.

#### **Specifications for the FotoFUN!:**

Print Method: Thermal dye-sublimation

Print Speed: Approximately 2.5 minutes per print

Colors: 16.7 million

Interface: Centronics-compatible 8-bit parallel or Macintosh® serial Dimensions: 9.625"W x 4.25"H x 7.5"D (244mmW x 108mmH x 191mmD) Warranty: One-year parts and labor Suggested List Price: \$599.95

#### **PrimeraPro Elite**

The PrimeraPro Elite is the newest printer in the Fargo product line. This high-quality dye-sublimation printer delivers 600 x 300-dpi output in up to 16.7 million colors, (Wax-thermal output is also supported at a higher printing speed and much lower cost). The Elite is ideal for creating professional-quality proofs, layouts, package designs, scientific images, and even T-Shirt and coffee mug transfers. Also, the PrimeraPro Elite can use a FotoShield ribbon to protect your prints with a UV coating to make the prints fade-resistant.

The Elite will create dye-sublimation prints in about 4.5 minutes and is compatible with both PC and Mac computers.

#### PrimeraPro Elite Printer Specifications:

Print Method: Dye-sublimation/wax thermal transfer

Colors: Up to 16.7 million

Print Speed: Wax color: 2 minutes per print (C, M, Y, K) Wax monochrome: Approximately 2 minutes per print (K)

Dye-sublimation color: Approximately 4.5 minutes per print (C, M, Y, O) Dye-sublimation monochrome: Approximately 2 minutes per print (K, O) Dimensions: 13.8"W x 8.7"H x 10.2"D (35cmW x 22cmH x 26cmD)

Power Source: 100-250 VAC, 50/60 Hz

Warranty: One Year parts and labor Suggested List Price: \$2,195.00

#### Pictura 310e

The Pictura 310e has all the features of the PrimeraPro Elite with the addition of being able to print tabloid-size 11x17" full bleeds (actual printable output is 11.95" x 17.4"). In either wax-thermal transfer or dye-sublimation the Pictura delivers crisp output in stunning 24-bit color.

#### Pictura 310e Printer Specifications:

Print Method: Dve-sublimation/Wax thermal transfer

Colors: Dye-sublimation: 16.7 million continuous-tone colors

Wax thermal transfer: 16.7 million half-tone colors

Print Speed: Dye-sublimation: Approximately 12 minutes per tabloid-size page (C, M, Y, K)

Wax thermal transfer: Approximately 4 minutes per tabloid-size page (C, M, Y, K)

Maximum Print Area: 11.95" x 17.4" (304 x 442mm)

Dimensions: 17"W x 8.25"H x 14.75"D; 26.5"D with paper tray installed (43.2cmW x 21cmH x 37.5cmD; 67.3cmD with paper tray installed)

Warranty: One-year parts and labor Suggested List Price: \$5,995.00

(Pictura 310 for Windows, is available without postscript, for \$4995.00)

Additional information can be found on Fargo's Website at "www.fargo.com".

# What is Wax Thermal Transfer and Dye-Sublimation?

FARGO color page printers utilize two different, yet closely-related, printing technologies—wax thermal transfer and dye-sublimation.

Wax thermal transfer is a process which uses a wax-based ribbon roll that is partitioned by a number of consecutive colored panels. The panels are grouped in a repeating series of three separate colors (Yellow, Magenta, Cyan - if using a 3-color ribbon) or four separate colors (Yellow, Magenta, Cyan, Black - if using a 4-color ribbon) along the entire length of the ribbon. The yellow panel is always printed first, followed by the magenta panel, the cyan panel, and finally the black panel if using a 4-color ribbon. The difference between a 3-color ribbon and a 4-color ribbon is that 3-color ribbons combine equal amounts of all three colors to produce a composite black within full-color images. 4-color ribbons produce full-color images with a more defined or "true" black because of the extra black panel.

As the ribbon and paper pass simultaneously beneath the printhead, the thousands of thermal elements within the printhead melt the wax-based ink, thus transferring thousands of tiny colored dots from the ribbon onto the paper. The paper makes a separate pass for each colored panel on the ribbon. By combining the different colored dots in different combinations (this process is called "dithering"), FARGO printers are able to print up to 16.7 million colors.

Dye-sublimation is similar to wax thermal transfer in that it still involves a three or four-color, multi-pass process beneath the same thermal printhead. The difference, however, lies within the special dye-sublimation ribbon and paper and in the transfer process itself. Unlike the wax thermal ribbon, each colored panel on the dye-sublimation ribbon is composed of a colored dye rather than a colored wax-based ink. When the dyes on the ribbon are heated beneath the thermal printhead, they vaporize and diffuse into the surface of the special dye-receptive paper. By varying the heat intensity of each thermal element within the printhead, it is possible to change the value and hue of each transferred dot of color, thus blending one color into the next. The result? Continuous-tone, photo-realistic color images.

### **Color Prints: Quick And Easy**

#### **Tetenal Mono PK RA-4**

By Paul Rowe

There isn't one of us who hasn't bemoaned the waste of time and effort when we just needed one or two prints for Aunt Myrtle, and the scene in front of us included detailed mixing, bringing water bath and chemistry up to temperature, etc.

The answer to this dilemma is Tetenal Mono PK RA-4, which allows <u>processing of color negative papers at room temperature</u>, and the times are fast. Actually the temperature range is between 61 and 77°F.(16 to 25° C.). The total process time varies with the temperature chosen, but is about six minutes including washes. Mono PK is very forgiving with process times. Developer time can be exceeded by up to 50% without adverse effects to the print, and the bleach-fix can be extended by as much as two minutes.

In addition to use in your JOBO processor you can use Mono PK in trays, or in slot processors like the Jobo DuoLab or Nova. Yield is 38 - 8x10" prints per liter of chemistry. When stored in full and tightly closed bottles, fresh working solution has a life of four months, and partially used solution has a life of three months. At Jobo we have kept the solutions in Nova processors for over 4 weeks with no deterioration of print quality

Some comments should be made about the ease of mixing. The term "MONO" in the name indicates that there is only one liquid to mix for each of the solutions in the kit. The developer concentrate settles into two layers in the bottle, (as illustrated in this photo) and should be shaken long and thoroughly before it is mixed with water to make a working solution. Both the developer and the bleach-fix concentrate mix in the same proportions: 200 ml of concentrate to 800 ml of water to make a liter. Working solutions of less than a liter can be mixed by diluting 1:4, and the remaining concentrates will last in a partially full bottle for up to 6 months with Protectan Spray (Item #109556).

Now, all of the above information is like hardware: just the nuts and bolts of the chemistry. The real experience with any chemistry, almost regardless of all of the nuts and bolts information, is "what are my prints like?" I can't show you comparisons because this is a black and white publication, but I can assure you that the final prints from the Mono PK are indistinguishable from prints done in the standard RA-4 chemistry at 95°F. The settings for your analyzer will be different from standard RA-4 chemistry, and consequently the filter pack will change, but your final result will be a full color print equal to your work with the standard chemistry. The plus of all of this is rapid and easy mixing, and the "no hassle" temperature control.

Tetenal's Mono PK RA-4 is available in two sizes, Part #109314 is a 1 liter package at a list price of \$18.95, and Part #109316 is a 2.5 liter package at a list price of \$37.50. Both are in stock at JOBO and are available through your local dealer.

# More About Toners: Blue Toner From Tetenal

By Paul Rowe

The Tetenal BlueToner is a single bath toner that is easy to use in daylight after normal processing of RC paper or films. It can not be used on fiber based papers because the paper base will be colored. With film, low speed black and white is normally used, and developed as a positive transparency prior to toning.

Three parts, in separate bottles, are mixed with water to make one liter of toning solution. Since this is an all liquid kit it is possible to mix quantities of less than one liter to handle smaller jobs. You can tone approximately 20 sheets of 8x10" RC paper, or 6 rolls of 135-36 film (or the equivalent at 80 square inches per roll) per liter of toner. When stored in a tightly capped bottle the working solution will last up to a week, depending on the degree of utilization. The operating temperature for either film or paper is room temperature, 68 to 77° F. If the material is dry, prewet it prior to toning. Agitation should be continuous during the toning time.

Film toning time can be varied between 2 and 10 minutes, and should be followed by a 5 minute running water wash and one minute in a wetting agent.

For black and white RC paper the print should be continuously agitated in a tray for five minutes, and followed by a three minute wash. After the initial toning it is possible to intensify the tone by immersing the print for 2 minutes in a B/W developer. The blue tone disappears. Wash for 1 minute, and then tone again. An intensified tone results. This can be repeated several times until you reach the desired tone.

When I was trying this toner the problem initially was blocked highlights. The toning can be reduced by immersing the toned print in a very dilute fixing bath solution. The first result is the clearing of the tone in the highlight areas of the print. The longer the print is left in the dilute fixer the greater the reduction of the blue tone.

Although blue toned images are not commonly seen these days, it was frequently used in the late 1800's and early 1900's. Blue tone can inspire many different effects or this technique can add that turn of the century look to your images, give it a try!

Blue toner-1 liter kit- is part #109564. The list price is \$21.95.

#### Infra-red Film And JOBO Tanks

By Paul Rowe

# "Can I process Infra-Red films in my JOBO tank, or will it fog the film?"

The question often reappears, in one form or another. We get letters, phone calls, E-mail messages, etc. The most recent was an inquiry from a gentleman on the other side of the world, Australia to be exact, with a legitimate question and a couple of bad experiences.

Now we have always reassured users about the usability of the tanks. In 1986 I last tested the tanks to reaffirm their usability. It seems that its time to do another test, just to be sure we haven't had anything change. The tanks and reels are still manufactured from the same materials, nothing should be different, but let's test them again.

Both Kodak High Speed Infra-Red and Konica Infra-Red were the test films. The choice was made because these are the films most asked about from customers. The tanks chosen were both the 1500 and the 2500 series. Kodak XTOL developer was used, and processing was done in a JOBO ATL-2 Plus.

The films were loaded, in complete darkness (according to the instructions), in a Nikon

F-3. The camera was placed on a tripod and each roll exposed to a scene with trees and sky. Upon return to the darkroom the camera was unloaded in complete darkness, and the film was loaded into the developing tank. The exposures of both rolls were varied by taking a series of pictures, then leaving a series of frames blank and finishing the roll by another series of exposures. Once the films were loaded into the developing tanks they were taken into the wet darkroom and processed. The room lights were on in both darkrooms as soon as the lid had been placed on the loaded tank, and remained on during the processing.

The strips of film reproduced here attest to the lack of fog. The unexposed portions are clear, with no discernible buildup of density. The exposures are clean, and the perforated areas are clear. There is no indication of density in the perforations, and no piping from the exposure into the perforated area.

For those of you interested in specifics, the densitometer showed the Kodak film to have a density of .08 film base plus fog. Remember that the Kodak film is a specialized film for technical use. The Konica, on the other hand, is meant for general photography, and can be used without the red filter. This approach eliminates the infra-red effect. The Konica reading was .32 film base plus fog. A reading like this is just about in the middle of the readings I am used to seeing on general purpose 35mm black and white film, and certainly should not be considered an unusual or elevated density

The only conclusion I can draw is the JOBO tank is still safe for infra-red.. If your results are less than this it would be best to review your handling of the film before you get it in the tank.