

User Profile: Rod Dresser

My introduction to photography was unique. As the most junior officer on my first submarine assignment, I was given the responsibility to learn to use the Polaroid camera that was designed to photograph through the attack periscope. My recollection is I made mention that I owned a 35mm camera to the Executive Officer and he felt that automatically qualified me as the shipboard photographic expert. This periscope camera was for training and intelligence purposes. It was a modification of a 4x5 camera body that used the fine (Kollmorgen) optics in the periscope. As I recall, it used what is now type 52 film.

The camera was used to record practice torpedo runs and gather intelligence. We kept Polaroid working nights to supply us film to photograph the North coast of Cuba during the Russian build-up in the early sixties. The experience gave me an appreciation for the technical aspects of photography. The aesthetic character of the art form was to come later.

After my retirement from the Naval Service, I had the opportunity to take some community college instruction in photography. Though I was exposed to some technical material and some art appreciation, my impression was the classroom experience was less than fulfilling. There were two problems for me as a student - there were a number of participants that were there for an "easy credit" and thus had no real interest in the subject and the time between learning sessions was too long. I was interested in getting as much information as possible in the shortest time period feasible. School may be the only way that most photographic enthusiasts can get their education, but I have found that personal study and attending photographic workshops is much more valuable for me.

Personal study involved reading every book on the technical and aesthetic aspects of photography. When I found a book that was worthy and resources were available, I would purchase it for my library. The most valuable part of my personal study was looking at photography. I dutifully attended every opening at a gallery or museum. I made a concerted effort to see every artist that exhibited. Even if I did not react to the artist's vision, I studied it closely and tried to understand the reason for my response. This method was instrumental in the formation of my personal vision.

Students often ask, who my favorite photographers are. Three come to mind (in order of preference) - Edward Weston, Paul Strand, and Irving Penn. Brett Weston, Man Ray, Imogen Cunningham, Julia Margaret Cameron, and Frederick H. Evans are artists I greatly admire and I am wonderfully moved by their work. Though I greatly admire Ansel Adams and his enormous contribution to photography, he does not have the extensive body of work that my favorites have accumulated. It is my considered opinion that Ansel Adams will be remembered for his technical contributions and his undying efforts to legitimize the art-form. Although, there is no one photographic artist other than Alfred Steiglitz that did more to *promote* photography and make the viewing public consider its artistic value. My current favorite contemporary photographers are Michael Kenna and Tomio Seike.

The following is a 1940 quote that gives the reader, I hope, some insight on why I chose Edward Weston as an inspiration for my work.

"In the thirty-eight years that have elapsed since I made my first photographs with a 3½ x 3½ box camera, my photographic equipment and technique have undergone various changes as my work and seeing evolved. Today I use an 8x10" camera with triple convertible anastigmatic lens. I print contact on glossy paper. Aside from spotting dust specks or small scratches I do no hand-work on negative or print. I do these things, not because I belong to any school, ist, or ism, but because these are the best means I have found to carry out my seeing and retain maximum photographic quality in my prints. To take full advantage of the unique potentials of the photographic medium the photographer must be so familiar with the capacities of his tools and processes that he can prevision his finished print before he makes his exposure. My principle reason for using an 8x10" camera is that it makes composing a far easier and more accurate job than it ever could be if I used a smaller camera and enlarged. Since I can see my finished print full size on the ground glass and determine the composition and values I want down to the last detail, I do not have to make duplicate negatives or rely on afterthought to correct errors. (Of course I may make duplicates if the subject is in motion, or decided in advance to trim if a subject does not fit my 8x10" frame.) I use glossy paper because its light-reflecting surface reproduces more of the negative than a dull-surface paper does. I do not know of any formal rules of composition, nor do I recognize any boundaries to subject matter. Subject matter is everywhere: it may be an old shoe, a cloud, or my own backyard. Whatever it is, its inherent qualities supply the rules of composition for that particular subject, within the scope of the medium. I do not attempt to copy nature or present factual records. I depart from literal rendering to whatever extent is necessary for the presentation of my response to the subject. I control each step of the photographic process, in order to carry out accurately my original vision. I am not a technician and have no interest in technique for its own sake. If my technique is adequate to present my seeing then I need nothing more."

Landscape and studio images are my preferred subject matter. I have always been attracted to the landscape as a subject. As my vision has refined, I have found that I am using longer lenses and am interested in details, especially abstract ones. Death Valley has been a subject of mine for the past eight years. As I look over the work done these past eight years, the horizon no longer appears in the images and the subject matter is much more simple and abstract.

Photographing in a studio situation is a result of two influences. As a commercial photographer in San Francisco there were many times that I could not leave the city either because of time constraints or poverty. Fortunately, the studio was always available and I would photograph people (friends) or objects just to assuage my artistic urges. The second influence was Edward Weston. His photographs of vegetables, shells, and excusado are so strong they have greatly impacted me. There never should be an excuse for lack of subject matter. Something is always available.

It is my firm belief that photography is like any other endeavor - the more you practice, the better you become. Photographing often and faithfully accomplishes several important objectives. Using your camera, processing your film and printing often and with consistency makes you more skilled technically. The sooner a photographer feels at ease with the process, the less time he or she will have to belabor the process thus free the mind for the creative aspects of the art form. The technical skills, particularly the use of the camera, must be second nature. Ultimately, the more one photographs the more images will be produced. As the accumulation process continues, a body of work will come forth. The photographer must constantly evaluate the work and select the images that he or she finds most attractive. As this selection process proceeds a pattern emerges. This pattern is the basis for an arising vision.

The formats I utilize range from 35mm to an 11x14" view camera. The 35mm camera I use is an F-4 Nikon. The optics are outstanding and the focusing and metering leave nothing to be desired. I use Kodak T-Max 3200 in this format. This allows me to hand-hold the camera and still have small apertures and moderate to high shutter speeds. Though the film is somewhat grainy, I have enlarged the negatives to 16x20" and I find the results very satisfactory. I admit, though, the normal print is 5x7" or 8x10".

The medium format I use is the Hasselblad system. This is my most frequently employed format. I am a committed Zone System advocate and Hasselblad lends itself to that system extremely well. Having three backs allows me to separate the exposed film by developing times. In addition, because of the new T-Grain films and the finest optics available to photographers, enlarging to 20x24" with no evidence of grain and superb local contrast is unconstrained. At this time I am

using Agfapan 100 (APX 100) with Rodinal developer (highly diluted). This combination gives me the grain structure and contrast I like for my prints.

My 4x5" is a 25 year-old Linhof Technica IV and I use Rodenstock lenses. This is a rugged, durable, moderately light camera. Metal view cameras suit my style. I find the rigidity and durability a real asset. My large format film of choice is Tri-X. The developer I use is Clayton F-6 at moderate dilution (1:14).

My 8x10" camera is a 20 year-old Toyo Field 810M. This is a real husky (read heavy) body and I never get further than 100 yards from my Jeep with it. However, it is a wonderful piece of machinery and I wouldn't part with it for any other camera. I find that I use a 450mm Nikkor most often with this format.

Recently, I have tested the new T-Grain Agfa and Ilford large format films. Preliminary tests indicate that these are wonderful films and I may make the shift to one or both of them. In addition, I have done some preliminary tests with Tetenal Ultrafin Plus and have found it to be very fine grain film developer. I anticipate that I will use it exclusively in the future.

For many years I used tray and sometimes the dip and dunk method of film development. About two years ago I purchased a JOBO processor. Since that time I have used nothing but my CPP-2 for all of my processing, everything from 35mm to 11x14". I use the Expert Drums for my large format films. The consistency and even development that I derive from using the JOBO has made my negatives easy to print. The constant agitation and precise temperature makes developing faultless every time. At the risk of sounding condescending, I feel the investment in the JOBO system was one of the most important I have made. There are two items I will never surrender - my Hasselblad and my JOBO.

If you would like to personally contact me about my photography or workshops I teach feel free to phone me at 408/655-4646 or fax 408/372-7112 . I am often on the road shooting but I will get back to you.

A New Black & White Developer, Kodak XTOL

By Paul Rowe

The last big waves in black and white were made by Kodak when they introduced T-Max film and developers. Most of us would say the waves haven't subsided yet, but it has been about 10 years! Well don't think you can relax; here comes another wave. It is a new film developer called XTOL (pronounced "extol").

There are so many things to say about it, I will probably sound like a commercial for Kodak, but bear with me (I won't list all the points). This developer is a two part powder that mixes easily at room temperature. It has excellent keeping properties, produces fine grain and high sharpness with good emulsion speed. It is packaged in sizes to make 1 liter (Cat.#888-8182), 5 liters (Cat.#875-1752), and 50 liters (Cat.#818-4517), and can be used as a full-strength mix, or in various dilutions (there is more to say about dilutions later).

Before we go further, I must applaud Kodak. The instructions for this developer come in three publications, J-106 for Replenished Processing, J-107 for Small Tank and Tray Processing, and

J-108 for Rotary Tube Processors. (Note that you can get copies of these by calling the Kodak Information line at 1-800-242-2424 or from Kodak's web page at www.kodak.com.) Other than any of the chemistry distributed by JOBO, these and the T-Max instructions are the only times I have seen any chemical manufacturer pay specific attention to rotary processing. In addition, they list starting times with exposure indices and contrast indices for a range of temperatures, and for films made by Ilford, Agfa, and Fuji, as well as the Kodak films. Roll films and sheet films are covered, for both full strength developer, as well as for dilutions of 1:1, 1:2, and 1:3.

The first sample films and prints I saw were done by Dave Belew. (Covered in a User Profile in JQ#7, summer 1995.) Dave processed Kodak TMX in XTOL 1:1 using times which he had worked out for his setup. The prints are spectacular: beautiful, grainless 8x10" prints with good shadow detail and no blocking of the highlights. Dave's enthusiastic comment was "Kodak may have finally done it!!!" Recently I had a chance to see more of Dave's work with Ilford HP-5 Plus and XTOL. The results were just as remarkable as the TMX.

During the Fall of 1996 I found many retail stores did not yet have the XTOL in stock, and some did not even know about it. I waited for a special order to show up. This is mentioned only because you may have the same experience. Be assured the Kodak supply centers have the product in stock, and your retailer will be able to obtain it from them.

When I first embarked on this round of testing, I chose the following films, all 135-36: Kodak Tri-X, TMX, and TMY, Ilford FP4+, HP5+, and Delta 100, Agfa APX-100 and APX-400, and Fuji Neopan 100. These were exposed to a white background, floodlight illumination, over an 8 f-stop range, all at the same exposure time, with the exposure at f5.6 being the correct exposure for the EI of the film. Exposures were made in a Nikon F-3, and processing was carried out in a JOBO ATL-2+ at 68° F, rotation speed 75 RPM.

PROCESSING WITH FULL STRENGTH DEVELOPER:

My first concern was to verify the Kodak information printed in the Technical Bulletins. They give you a chart labeled "Time Compensation", which is intended to be used with full strength developer. For the purpose of this testing the developer was used one-shot and not replenished. The chart says you can process up to 5 rolls of 135-36 in one liter of developer, which is 200ml per roll. Users of rotary for the most part use developers on a one-shot basis, therefore I made no attempt to go further with the developer by using either time compensation or replenishment.

The first runs I processed were of each of the listed films with 200 ml of undiluted developer (per Kodak's recommendations), and these results were considered the standard against which later developer variations would be judged.

Since most JOBO film tanks will process with less than the 200ml per roll required by Kodak, the next tests were carried out at the JOBO tank minimums, using quantities of 140ml in a #1510 tank. In these cases, with the Fuji Neopan 100, and the Agfapan 100 and 400 films listed, there were signs of under development. The highest densities were low, and the film could not ever achieve the Contrast Index (CI) stated by Kodak.

The Kodak and Ilford films were a different story. Using 140ml of XTOL full strength the results were comparable to development at 200ml. (In making this comparison I considered a variation of 1/3 f-stop or less to be acceptable.) Based upon these results it is safe to say that with Kodak and Ilford films you can process, with full strength XTOL, at the stated solution quantities for the JOBO tank being used.

The information in the paragraphs above poses some problems for the rotary processor user, especially when using film other than Kodak or Fuji. When you need 200ml per roll you alter the

number of rolls a given tank can process by a substantial margin. Remember that the quantity printed on a tank is the minimum quantity required to cover the film on the reels. This minimum has nothing to do with the amount the tank will hold or the amount of solution needed to properly process the film. The following chart lists the film tanks, their maximum solution volume without draining from the cog lid, and the number of rolls that can be accomplished using 200ml per roll of full strength XTOL.

TANK # MAX. VOLUME # OF ROLLS

#2523 550 ml 2 rolls 135-36 or 120 in 400 ml./6 sheet 4x5 in 300 ml.

#2553 1400 ml 5 rolls 135-36 or 120 in 1000 ml./12 sheet 4x5 in 600 ml.

NOTE: Do not use over 1000ml in any manual processor !

#1510 170 ml UNUSABLE

#1520 270 ml 1 roll 135-36 or 120 in 240 ml

#1526 600 ml 3 rolls 135-36 or 120 in 600ml

Expert #3006 1000 ml 6 sheets 4x5 in 300 ml

Expert #3010 1000 ml 10 sheets 4x5 in 500 ml

Expert #3005 1000 ml 5 sheet 8x10 in 1000 ml

Note: If you are using a CPE-2 or 2+ Processor you should limit yourself to the #2523, #1520, or #1526 tanks because of solution limitations. You should not overload your motor with greater than the 600ml available in your bottles. Any of the other processors can use any of the tanks specified above. In all cases it is assumed that a JOBO Lift is used. If you are using magnet drive the tank capacities may be slightly greater. You will need to do some testing yourself. The deciding factor on the amount of film that can be processed is the requirement of 200ml of undiluted XTOL developer for each 80 square inches of film to be processed. One roll 135-36, one roll 120, four sheets 4x5", or one sheet 8x10", each equal approximately 80 square inches.

In each of the tests with full strength developer the Kodak time yielded negatives very close to their stated aim points for density and contrast index. Be sure you run tests in your own set-up to assure yourself the densities being achieved are satisfactory for you. The published Kodak time is not cast in stone—it is a starting time for you to use to perfect your process. Both time and temperature can be changed to achieve desired results.

PROCESSING WITH DILUTE DEVELOPER:

The use of dilute developer in rotary processing has always been a problem, mostly because users want to use as little developer as will cover the film, and at the greatest dilution possible. Once this is accomplished we receive the sample films at JOBO with questions as to why the density is so low, there is no shadow detail, and on and on.

This miserly approach invites disaster. Those of you who have read other articles of mine are going to say "There he goes again". You are correct! There is nothing cheaper than chemical solutions when the cost is compared with a re-shoot.

Any film requires a minimum amount of developer in order to properly process. Less than the minimum amount yields thin negatives, lack of shadow detail, and low D-max. Conversely, a

greater than the minimum amount of solution, when used at the same developing time, does not overdevelop the film.

With other developers I have worked with, the minimal amount of developer has generally been less than the minimum amount stated on the JOBO tanks. This means there is already a capacity of developer in excess of the minimum required to develop the first roll. When the developer is diluted, say 1:1, additional developer is needed to be sure that the film is developed properly. An example of this is D-76, which is often used 1:1. Using D-76 full strength in a JOBO tank, may require 140ml to cover the film (this is sufficient for thorough development). Going to D-76 1:1 requires a 50% increase in solution volume (approx. 210ml) in order to assure that there is enough active chemical to properly process the film. Densitometry readings of the film developed in full strength versus the film developed in 1:1 dilution with the increased volume will yield equal curves. In this D-76 example the developing times would be 6:00 minutes for full strength and 8:00 minutes for the 1:1 dilution. The point, of course, is that more process time is required with the dilute developer, in addition to the increased volume of solution.

With Kodak, Ilford, and Fuji films, 1:1 dilutions presented no problem when using 200ml (100ml XTOL/100ml water). When using the times shown by Kodak the film reached proper density. I did not perform any tests at dilutions greater than 1:1.

With Agfa, and very possibly other films, dilute XTOL may become a problem, especially in rotary processing. Requiring 200ml of full strength developer per roll has already reduced the number of rolls that can be processed in most JOBO tanks. Further, testing of XTOL at dilutions of 1:1 reduces further the number of rolls that can be processed in a given tank. Processing at 1:1 with less than a 100% increase in total solution quantity showed reduced D-max and lower densities. It was not until I was processing one roll of film in 200ml full strength developer plus 200ml of water that the densities of the roll were approaching the process in full strength developer alone.

To determine the quantity of Agfa (and any other non-Kodak, Ilford, or Fuji) film that may be processed at 1:1 dilution, the easiest move is to refer to the chart in the first part of this article. For roll films, cut the quantity of film in half, being sure that you have 400ml of solution for each roll of film. For sheet films, double the solution quantity as long as the total quantity remains less than maximum volume. If it appears you would need to exceed the maximum volume listed, then just halve the quantity of film. It is easy to see that even at 1:1 dilution it may be impractical to try and process any quantity of film. At 1:2 or 1:3 dilutions it is hopeless when given the volume restrictions in rotary processing. Bear in mind however, that manual inversion processing in a film tank automatically allows you to use a greater volume of solution, and therefore increases the number of films that can be done in that tank. Naturally, a deep tank set-up (sink line or dip and dunk) does not suffer from these volume restrictions.

One last observation for you. If you intend to try XTOL at 1:1 or greater dilution you should test for yourself to be sure that Kodak's suggested times yield satisfactory results for you. Also, test for developer quantity, since you may find that results at less than the 400ml (200ml full strength / 200ml water) will work for you. Time constraints prevented me from carrying this testing further, but a little additional developer time at the 1:1 dilution could bring the densities up.

PREWET ?

For years now JOBO has suggested that black and white films undergo a five minute prewet prior to the introduction of developer. Using a prewet before the XTOL developer resulted in lower D-max than when the developer was used

without a prewet. The only conclusion we can draw is that a prewet is NOT indicated with XTOL! Your results will be more consistent without prewet.

CONCLUSIONS:

In a perfect world all of this report would be backed up by quantified densitometry in which the differences were exact and the suggestions I have made would be obvious to all, even if an H & D curve was considered a French aperitif. Well it just isn't so. Some films responded differently than others. As a generality, T-grain and other advanced technology films, like Delta, responded differently than the older emulsions. The suggestions I am making are safe, and will work. Depending on your film, you may find that I am all wet, and you can use dilute developer and not need to maintain the 200ml of full strength developer. This will depend on your film, exposure, and the parameters of acceptability only you can establish for yourself.

XTOL is a beautiful developer. Both the negatives and the resulting prints can take you to another level of perfection, but like so many things new, it needs to be learned (read: tested).

Kodak has really given us a new jewel, and again I want to thank them for it. The instructions for rotary processing would be better if they made reference to the chemical quantity when using XTOL in diluted form, but don't let this dissuade you from enjoying it. Remember, the time suggestions made by Kodak are starting points. If you hold only to them you may never know what the film/developer can really do.

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Come In Out of the FOG

By Ken Owen

I'd like to shed some light on a frequent problem -- film and paper fogging. Light fog comes from a variety of sources. Occasionally someone will take the light trap apart on their film tank, and put the funnel back in upside down. When that happens, the tip of the funnel does not reach into the center core of the tank, and then the light just pours into the tank and fogs the film.

Similarly, if you fail to use the center cores, you again have no light trap, and the film is ruined.

Some customers will ask what color to paint their darkroom. Actually, the color will not matter at all if there is no light; without light there is no color. Painting the room matte black will help if you must live with some minor light leaks. The flat black will absorb most, but not quite all of the light. However, it is much better to eliminate *all* sources of light before they cause you trouble.

Around the door frame is a fairly common source of light. I solved it in my darkroom in three steps. First I put in a raised door sill on the floor. Then, on the inside of my door I attached strips of 1/4" x 1-1/2" wood with 1/4" overlapping the edge of the door, thus covering the gap around the door. Then, in the middle of the door hinges I placed some 3/8" weatherseal foam strips. The combination of these items *eliminated* all leaks around the door.

The most insidious light problem comes from the electronic gadgets we all use in the darkroom. This can be a digital timer or analyzer, a pilot light on a print dryer or processor thermostat, or some indicator on a telephone or radio used in the darkroom. Most of us take the little red indicator LED's on various electronic devices for granted. Don't, they are a remarkably powerful source of light.

Several years ago we had a customer complain that his film was being "fogged by chemicals". We were rather confused by his statement. When we asked him to clarify it further, he told us that on his 4x5" sheets of E-6 film, he could see the shadow of the 2509N reel he was using, and since he knew that his darkroom had absolutely no light leaks, it must be coming from the chemicals in the tank.

I happened to be traveling in his area, so I visited his studio and darkroom. I asked him to place the film loader and reel in the position where he always loaded the film. That turned out to be on the baseboard of his enlarger. I inserted some of the fogged sheets of film into the reel and lined up the shadows with the parts of the reel that caused the shadows. Then instantly I could tell what caused the problem. In the corner of the ceiling, about 10 feet away, I saw an infrared detector which was part of his security system. If you moved your body, a single red LED would illuminate for a matter of seconds. We covered up the red LED with black photo tape, and he never had the problem again.

On another occasion, one customer asked us if the light coming from under his furnace might fog the film. His darkroom was simply a corner of his basement, and he shared space with the furnace. Of course we advised him to partition the basement to block off the illumination of the gas flames that warmed his home. The light pouring out from under the furnace would have been a *big* trouble-maker.

The simplest rule of thumb in determining if you have a light leak is to go into the dark for about 10 minutes to let your eyes adjust completely. Then look around. If you see any light, then it is too much light. In normal darkroom operation, by the time your eyes can see light, film has already been ruined.

Don't use too much "glow tape". This phosphorescent tape is handy to place next to a light switch or door knob, but use only tiny little pieces. You don't need enough to illuminate the room, just enough to know where the knob or switch is located.

We all tend to take our darkrooms for granted. Once we get them "good enough" to work in, we rarely make structural improvements. Why don't you stop right now, and go check your darkroom for light leaks? It will be ten minutes well spent. Make your darkroom completely light tight, and increase your confidence in your work space and the work you do in it at the same time.

Regarding Water Quality

By Damon Dean



This article addresses a flood of water-quality problems.

"Bad" water problems are the most common and most easily cured of all processing related problems.

Any darkroom chemical works in water. If the water used is not pure, and particle free, there can be problems with performance and consistency. Unfortunately, more and more parts of the world are experiencing more and more problems both with quality and consistency of the "drinking" water supplies.

Essentially the things you need to know about the water you are using are; pH (acid/alkali), "softness" (calcium/iron content), suspended matter (dirt), and any unusual dissolved material (chemical/biological). It may be useful to have a sample from your water supply checked out by whatever (governmental) authority supplies or controls drinking water in your area. It probably would be good to do a test every few months, to see if the water conditions change seasonally, or more often.

If you suspect that your water is less than optimum for photo use, you may want to take corrective measures by treating the water with softening, filtering or other procedures as necessary. If you don't know specifically what may need to be done, check with local photo labs and ask what they are doing for similar problems. The governmental authorities may also be able to head you in the right direction.

Essentially, the common cures for common problems are; softening "hard" water, filtering to remove most all dissolved solid materials and common dissolved minerals, metals and hydrocarbons (oil).

What I use, and recommend for marginal water (that does not have any exotic problems as well) is an industrial sized, combination 5 micron (filter particle size) and activated charcoal (for dissolved stuff) filter. In most cases, this is sufficient to remove the objectionable stuff from the water.

If you have other problems with bad water, talk to a specialist in water treatment for the most effective cure.

The other solution is to replace the water supply with bottled or distilled water. If you get bottled water, be sure that it does not have any additives (bubbles, soda, or flavoring). Distilled water is your safest bet.

The most important chemicals to mix with distilled water are developers. They are usually the most sensitive to the condition of the water. If your water is "hard", mixing a wetting agent or stabilizer with distilled water will help with spot free drying. Some people mix all their chemicals with distilled water. If your water is bad it may be worthwhile to do this too. If it is not practical to buy distilled water, you could get a still, and make it yourself, although this could get costly.

Some photo-chemical manufacturers may not recommend using distilled water for the mixing of some of their chemicals. However, the benefits of having a good quality water to work with, (distilled) versus, not using distilled — when you have bad water — outweigh the fairly niggling difference that distilled water would make to the mix.

Another system that will produce fairly unlimited amounts of essentially pure, but not pH adjusted water is "reverse osmosis". It is not inexpensive, but with a lot of use, may prove an economical alternative.

To recap, good water is very important. If you think a problem with processing is caused by bad water, try a test with distilled water to see if it improves. If it does, examine filtering alternatives, or the practicality of buying good water.