

The Great Paper/Developer Shoot-Out Part 3: Drydown



This is Part Three of a two-part series of articles about black and white papers and developers. Parts One and Two of the Great Paper/Developer Shoot-Out tested 10 black and white enlarging papers and eleven paper developers and compared the results.

The Sigh of Relief

Ah, at last! All the paper/developer testing was done, articles written, Expanded Internet Versions mostly written. I could finally make some photographs! The light was right, the temperature warm (February, New Hampshire, 40 degrees) and the ice gorgeous on a stream near Henniker. One day and 48 negatives later, I felt like I'd purged at least some of the darkroom burnout I had accumulated during my paper/developer binge. Binged and purged. Is there a clinical name for Darkroom Bulimia?

So, I once again broke my steadfast rule about immediately printing new negatives. Proof sheets, for me, are like wine: they need to be aged to sort that which ages well versus that which turns to vinegar. All proofs look gorgeous when wet. But I age proof sheets: many of those initially gorgeous pictures turn sour, like cheap wine. When I do, I print less, and my output improves in quality. At least I had the restraint to sort the proofs and start printing what I felt was the best first, and work my way down. In the end, I lost interest in half the images I had thought I wanted to print - they no longer excited me enough to be worth a couple hours apiece in the dark.

Printing ice and snow is tough. The snow has to look bright and real and white, its subtle detail apparent, not chalky. Forte and Ilford Multigrade developer. Make a beautiful print. Now, what about drydown? I knew the papers all dried down, because I had matched the white T-shirt worn by Hillary on wet prints across several papers during the testing, and they all dried down to varying shades of dingy off-white. So, what to try? How 'bout a 5% reduction in exposure? I had used 4% for the old Zone VI Brilliant, and 8% for the old graded Seagull. I tried 5% by dialing it in on my old Zone VI Drydown Timer, which automatically

reduces exposure time by the amount on the Drydown dial. I ran out of Forte and printed some on Seagull Grade 2, with 8% dialed in for the final prints.

Despair Strikes

ARGH! The next day, my beautiful, glowing snow was dingy slush on the dry prints. 5% was not enough drydown for Forte, and 8% didn't seem right for Seagull Grade 2. A whole day of darkroom work wasted, having made a lot of bad prints. I don't care so much about the paper, but wasting the time was awful.

Part Three of Two Parts

On the other hand, I realized that I had a new mission. Since I was getting more Forte, I could do a (relatively) quick drydown test for all 10 papers (Ulp. Would I do Bergger Silver Supreme too?), write Part 3 before Mr. Simmons' editor, Tim, went on vacation to France (do you wonder how magazine deadlines are set?), publish a table of drydown percentages as a service to the world, and burn out in the darkroom one more time. Sounded like fun to me. Darkroom bulimia: I had another binge ready to go.

Evil Rises Like Cream

As soon as one starts thinking about these things, evil rises, like cream, to the top. OK Bruce, the devil on my shoulder said, does drydown vary with developer? Of course not, intuition said. But this was the same intuition that told me that toning time would not vary with developer, which turned out to be dead wrong. Was intuition as accurate this time? I am going to guess that it is, because I still can't bear to be in the darkroom long enough to test more than one developer for dry-down. I'll use these results as a guide, and adjust accordingly. Life's way too short to spend it testing for drydown.

By the way, my partial bottles of liquid developers are oxidizing rapidly, and current-technology plastic Coke bottles are keeping full bottles of developer just fine as long as I keep them in a drawer out of the light (it's PF 130, and darkness is recommended to keep the glycin from oxidizing). Ilford Multigrade and Sprint Quick Silver liquid developers are holding up better than others, and remain usable with confidence three months later in partially-filled bottles.

Does drydown vary with toned versus untoned prints? Since I make only toned final prints now, I no longer care, and as always, this was about Me. Toned only.

Does drydown vary with fixer? Someone at the Monterey conference suggested it might. Gee, thanks. To solve this, I remembered that I'm now using only an alkaline fixer, such as Photographers' Formulary's TF-4, which reduces wash time radically, said my HT-2 tests. So only one fixer for Me. Save the planet. Save my electric bill pumping water up from our 400-foot deep well. Save my septic system's leach field.

Does drydown vary with paper grade? With VC? With graded papers? This just kept getting worse, and the devil didn't leap off my shoulder.

Does drydown vary with paper emulsion batch? I'll cross that Rubicon when I need to.

Yet Another Process

The process was fairly easy and quick. The basic question: how much less exposure should one give a print so that, when it dries, its whites match a wet print? So, make a good print of a nice snow and ice picture, (test strip, pilot print) and then duplicate it three times, with 4%, 7% and 10% less exposure. Label the percentage with pencil on the back. Pray drydown doesn't exceed 10%, which is the limit of the timer. Tone and hypo-clear all. Wash and dry the test prints (I dry prints face down on screens overnight) while keeping the reference prints wet in the print washer. Compare. If it's between two percentages, make a best guess and call it Close Enough for Photography, erring perhaps a hair towards lighter rather than darker.

Yet More Results

Lots more prints, but evaluations are much easier. I made a table. Note the inclusion of Kodak Polycontrast IV and Arista EDU, which I have in-house and decided to test. Where I have strayed from 4%, 7%, 10% it is based on a “best guess” that will edge towards a slightly lighter result rather than a darker one. Close Enough for Photography. Luckily, none exceeded 10%.

I spent 4 hours in the darkroom completing the test. I think I’ll go use just Polaroid for a while. Purge a little.

I’ll tack a copy of this chart on my darkroom wall and have it forever. Seagull Grade 2 came out at its old 8%, so I’ll chalk my initial disappointment to bad printing (maybe I was tired by then). Galerie and Forte surprise me – for some reason I would not have guessed them to be that high. Only a few drove me to split the difference between test prints and a guess. 3% differences in exposure aren’t much, and in some ways it was harder to tell than differences in developers.

As I said before, these are probably good starting points. Your results may vary for any number of reasons, and this test is so simple and fast that it’s worth doing for your favorite paper/developer combination.

Paper	Drydown Percentage Kodak Dektol
Agfa Multiclassic	7%
Arista EDU	10%
Bergger Prestige NB Grade 2	4%
Bergger Prestige NB VC	6%
Bergger Silver Supreme	4%
Forte Elegance Polygrade V	10%
Ilford Cooltone RC	7%
Ilford Multigrade FB	8%
Ilford Galerie Grade 2	10%
Kodak Polycontrast IV RC	8%
Kodak Polymax	10%
Oriental VC	10%
Oriental Grade 2	8%

No, Not Part Four!

Well, yes, probably. At the Large Format Conference, Paula Chamlee asked why I hadn’t tested Kodak Azo, and she is so charming that it’s hard to say no to anything she asks. I was also approached by Pat Brady, who has developed a high-output cold light source for Omega and Beseler 4x5 enlargers for enlarging onto Azo paper. He asked if he sent me a sample head would I test Azo as an enlarging paper. I said I’d think about it. That night, I had a dream about how I would have to do that test (a dream: now you know how bad it gets). Before breakfast, I had agreed to do it. Michael Smith agreed to coach me on Azo (thank you, Michael). You won’t read Part 4 for a while, because I need to tune my film development time to match Azo. I also need to actually (gasp!) make pictures!

While we’re at it, we’ll test the new Kodak Polycontrast IV RC and Arista EDU, and add them to the paper comparisons. Wendy Erickson of Ilford has sent me replenishment of my Galerie, and a collection of marvelous smaller bottles of Multigrade developer (marvelous because they won’t oxidize like the big gallon bottle I bought and have partially used. Smart, that Wendy.) Thank you, Wendy and Ilford, for contributing

these materials. I will put them to good use. I picked up enough Kodak Polycontrast IV at the Large Format Conference to have enough to run tests. Thank you, Kodak.

Mr. Simmons likes the idea. But don't hold your breath, anybody. There's a lot of preliminary work I need to do, some photographing, a lot of test printing, and writing up the results. And I'm not going to let editor Tim, or even Steve, rush me: all these materials, as well as all these nice people, deserve the best job that I can do. Be patient.

Bruce Barlow continues to live in insanity and photograph in Swanzey, New Hampshire. Bruce almost was promoted to staff member from junior staff member at Fred Picker's Zone VI Workshop, and worked for Zone VI in the late 1980s. He looks younger and slimmer in the "Printing with Fred Picker" video. He and Richard Ritter give workshops through Fine Focus Workshops. He can be reached at Bbarlow690@aol.com, or via www.finefocusworkshops.com.