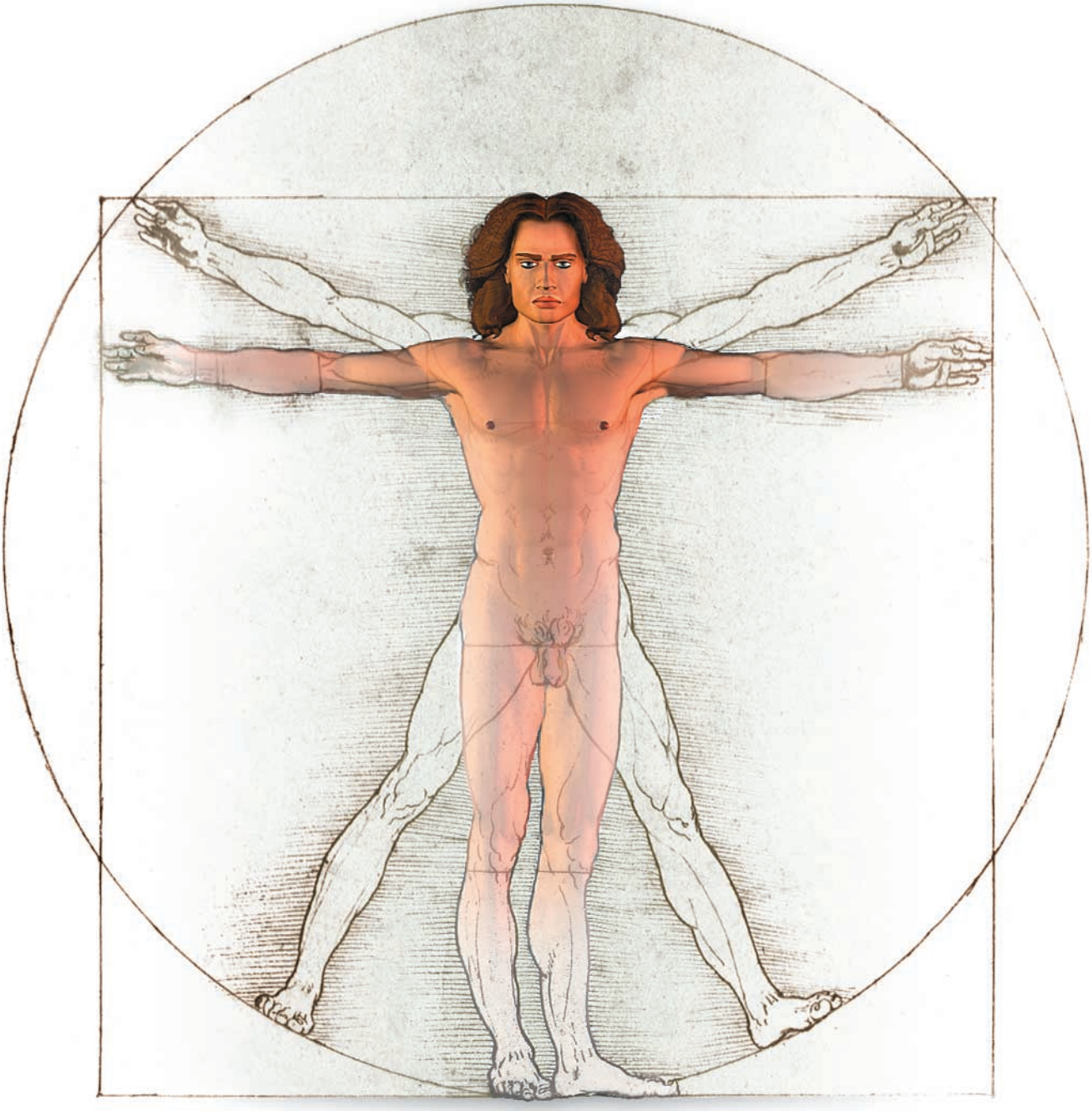
GRAPHIC EXCHANGE



LEARNING CURVES

DIRECTORY OF CANADIAN GRAPHICS COURSES

DESKTOP COLOR—SHOW ME THE PROOF • HYPE YOUR WEB TYPE

NAPSTERISM: THE RISE, FALL AND REBIRTH OF A NEW RELIGION

PLUS GOLIVE 5 • METASTREAM • MACWORLD NEW YORK

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by Ron Giddings

show me

The promise of simple, accurate dangled before us since the birth

First Epson brings out the 1200 model, in all its six-color, six-picoliter dot-sized glory. Then Adobe brings out a Pressready profile for the model. That's too much to ignore. We decide it's time to round up the PostScript software available for the Epson inkjets and see if we really can have a prepress proofer for under $1000.

THE RULES

We quickly see that there's going to be a problem showing inkjet proofs in the magazine because they'll have to be scanned. We chose a picture we had already printed so that we could scan a press version together with the proofs. Despite the fact that it was screened, we felt that all the pictures would be in the same ballpark for comparison.

The picture was from Reflexion Phototeque's delightful Digital Collection CD, Faces 2: *Characters and Occupations*. This was a doubly good choice because it was already in CMYK, thus eliminating the color mode minefield we might have found ourselves in. We placed the image in a Quark page and started testing.

THE HARDWARE

Within two weeks of testing the 1200 model, Epson brought out its 1270 model. Now this begs the question 'What if we wait another two weeks?'

Sure enough, the 2000 is announced, with archival inks and papers. Well, let's leave that for another issue.

Right now, the 1270 has all the right stuff. It's whisper-quiet, fast (USB is necessary, Mac users, but well worth the $50 or so for a new card), and down to 4-picoliter droplets! We're convinced it makes better use of ink than the 1200, which is a good thing.

THE ORIGINAL NERD DATE... AND THE CLONES

Image proofs (left to right): The magazine print (from our March/April issue), Epson's own 1270 software, iProof's PowerRip 2000, Adobe PressReady, and Aurelon DeskCheck

the proof

color desktop proofing has been of PostScript. Are we there yet?

We went through an awful lot of paper because the machine would simply stop halfway through a sheet. Why? Who knows? But Adobe quietly changed its PostScript software and Epson changed its driver. We only found out by going to Adobe's Forum for PressReady website. So check both sites (Adobe and Epson) before doing anything on the 1270!

THE SOFTWARE

Photographers who have discovered Epson printers and who print directly from Photoshop need not read any further. PostScript isn't going to do anything for you except waste time and RAM.

This software is for QuarkXPress, PageMaker, InDesign, Illustrator, or Freehand. Remember, these are software RIPs, so they're going to take a lot of RAM on top of whatever you need for your imaging software.

Second, choose your paper wisely. There aren't a lot of papers on the market that work with 4-picoliter dots (we got horribly beaded-up gack from Ilford Inkjet Photo Paper and Maxell glossy). Besides, when it comes time to tell the software what paper you're printing on, they're all named using Epson nomenclature. Hey, let Epson make its money—use Epson paper. Besides, there's no product that can touch Epson's Matte Paper-Heavyweight anyway.

The first print was made with Epson's new driver. Now, because Epson went after photographers with this printer/ink combo, we weren't too surprised to get strong Kodak-type colors. The extra cyan and magenta ink reinforces this.

What *was* surprising was the fact that the Epson software seemed right at home with Quark. If you don't really need exact color, there doesn't seem to be much reason to switch.

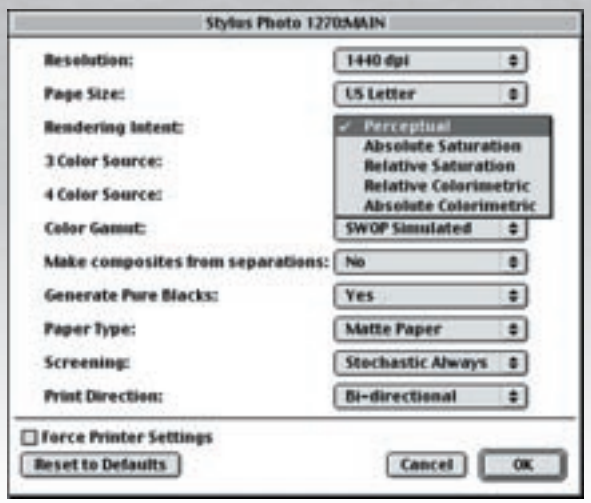
…But wait!…

IMAGE COURTESY REFLEXION PHOTOTEQUE

IPROOF POWERRIP 2000 AIMS AT MATCHPRINT

iProof Systems of Melbourne, Florida (*www.iproofsystems.com*) believes Epson printers are capable of results rivalling Cromalins and Matchprints. To that end, they created PowerRIP 2000 (version 5.3, $249 [US]) for all Epson printers, including the large format printers. As mentioned before, the paper (iProof's is called PressProof Paper) is an important element in making this work.

The software works using LaserWriter 8, fooling it into thinking it's writing to a color imagesetter. One creates a 'queue', a sort of virtual printer which describes the attributes desired. That in itself could be treacherous, were the choices not laid out so clearly. Although the 1270 is a 6-color printer, PowerRIP delivers CMYK as exactly or as perceptually correct as one could wish for.



PowerRIP's software walks you through all the choices you need to make.

One thing became apparent when an error message continued to appear each time we attempted to print. PowerRIP doesn't like sharing space with the original Epson driver. We removed it and all went well. We would run into the "battle of the drivers and ICC profiles" a couple more times before we figured out what was happening.

Although the "canned" profiles got us very close to what the magazine print looked like, PowerRIP has spline curve controls to season your prints to taste. Heck, the software even supports DCS 2.0 to fake spot colors. All this remains a part of your 'queue'. Probably due to RAM starvation, we found the best way to print from Quark was to print a PostScript file and save it in the queue rather than going directly to the printer.

ADOBE PRESSREADY—GOING, GOING...?

Eagerly awaited, Adobe PressReady ($249 [US] *www.adobe.com/products/pressready*) appeared to have all the necessary elements for success—after all, Adobe invented PostScript. Since PressReady is a PostScript 3 RIP, there is no using LaserWriter. Just go under Chooser and click on the PressReady version of your printer. The place to select all the information you need to specify appears in Quark's Page Setup/Print boxes. There are quite a few pulldown specs to wade through, but fortunately, PressReady can save the settings for use next time. Once again, additional RAM must be assigned to PressReady in its Resources Extension.

The print was excellent, if somewhat warm in color. It was this orange cast that suggested to us that we should print a color ringaround. Test Strip 2.0 created nine variations of the Nerd date TIFF with 20% shifts in brightness and color. Epson's software showed how garish these variations really were. PressReady, on the other hand, seemed to disguise differences so much that all nine looked relatively similar! That's scary. A picture could be 20% too blue but still look great! Checking the PressReady forum at Adobe's website revealed other stories. Whatever it's doing, PressReady doesn't seem to allow for personalized profiles.

This begs the question, "Is Pressready simply a filter?" We may never know if, as recent persistent (and undenied) rumors suggest, Adobe is going to drop PressReady soon.

AURELON DESKCHECK BUILDS CLOSED LOOP

At this point we decided to break away from our "under $1000" limit. Was there any way of creating profiles for the monitor, printer and press for a truly accurate preview?

DeskCheck (~$699 [US])from Aurelon of Laguna Niguel, CA (*www.aurelon.com*) works with an X-Rite color spectrophotometer to calibrate all three. DeskCheck has its own ICC profiles and uses Laserwriter 8 in a way similar to PowerRIP, but its calibration target provides a measurable standard. The problem we encountered was with the X-Rite machine itself. The convoluted sequence of cables (Ethernet to parallel-parallel to serial-serial to USB) gave us no end of difficulty getting it to work. Hopefully X-Rite can make a direct-to-USB connection in the future.

At any rate, due to time constraints, we were unable to get the calibration target printed on press, and so had to settle for a standard SWOP profile. The X-Rite is meant to read a press print as well as a print made on the Epson and configure profiles. As things turned out, the Epson proof was a little dark compared to the others, probably because Graphic Exchange is printed Sheetfed, not SWOP.

PRINTS CHARMING—BUT CONFUSING

When we first saw the Epson 1270, we knew it had the potential to be the bane of pressmen everywhere. After all, no press could ever match its six-color stochastic output. If it was ever to be useful as a proofing device it would need to be harnessed by reliable, accurate software. But after using three software solutions, all of which promised exactly that, it's evident that color remains the complex minefield it always was. Predictable, repeatable profiling is still a job for professionals. As they say, be careful what you wish for: you just might get it.

Are we ready to accept responsibility for our own final color proofing? If so, just be aware that for today there is still no such thing as a one-step solution to desktop color proofing. But, hey, it's only the beginning.

In the meantime, boys and girls, don't try this at home. ■

Putting the squeeze on your files

OK, so let's say you're reasonably confident that your image will go to press more or less as you intend. Are a Zip and proof in a courier bag still necessary, or can we trust e-mail?

Well, for starters, your server is going to tell you that it won't send more than 5MB. Surely there's better compression software than JPEG by now—isn't there? Yes, there is…but—it means downloading yet another free plug-in. If you can convince your client to download the necessary viewer plug-in, you'll be delivering lossless imagery over the Net from now on! If you can't, JPEG still rules.

We compressed a 9.5 MB file with some of the better compression formats to see just how much we could shrink an image with *no loss of quality* (their claims, not ours).

A standard Photoshop TIFF with LZW (lossless) compression gets it down to 5MB. LWF (Lurawave) from *www.lura-tech.com* uses a different, but very impressive, recipe to take our picture down to 3.4MB.

LZW 5MB **LWF 3.4MB** **STN 3.3MB** **PSJPEG(Max) 2.1MB** **Mr. SID 476K**

Next is Genuine Fractals Print Pro from *www.altamira.com*. Not only are we now down to 3.3MB, but with fractal algorithms, anyone who has the free GF reader can decompress the STN file to sizes larger (or smaller) than the original! This means we have a file of our image capable of being accurately resized to Web or poster dimensions! This has been a secret weapon of 35mm photographers for a while. Save your image as a GF file and blow it up. The fractal nature of GF's algorithms does an amazing job of hiding grain, while preserving the clarity!

But wait a minute! What about Photoshop's JPEG compression? At the maximum quality setting, and baseline optimized, we get 2.1MB! And quite frankly, you'd have to blow up the picture 400% before any differences could be seen. And no plug-in necessary. So what's so bad about JPEG?

HOW LOW CAN YOU GO?

Past experience with making JPEG images for the Web has shown that JPEG 'artefacts' show up most often in smooth areas, and staircasing can be seen on diagonal fine lines. On the left above, the enlarged LZW retains smooth blends of tone and relatively clear lines. With the remarkable compression that Mr. Sid (*www.lizardtech.com*) achieves, we introduce slightly staircased diagonals but retain the smooth tones of the image.

What does JPEG do when our file comes down to 476K? At this magnification we can see that JPEG compression is based on a quilt-like pattern to selectively eliminate information. Usually only the odd horizontal or vertical line shows up in the smooth areas of the image, but it is easy to see that these different compression recipes do, in fact, change the image in different ways.