Preflighting publications

Ken McMahon offers a foolproof guide to ensuring a smooth print run using the preflight approach.

Inkjet colour printers are great for printing short-run colour documents such as stationery, in-house newsletters and invitations, but when you need more than a few copies often the only cost-effective answer is commercial printing. Even for professional designers handing over a colour job to a commercial printer is something of a gamble. There's just so much that can go wrong.

The process of ensuring your commercial colour print job doesn't turn out to be a costly mistake is called preflighting. Before departure, pilots check over their aircraft to make sure there are no faults that would result in mid-air disaster. Failing to perform a similar routine on your artwork can also have catastrophic results.

A number of products have appeared that make the preflight routine quick and simple and highlight problems that might be missed by the naked eye. The two most commonly used are Extensis Preflight Pro (www.extensis.com) and Markzware's Flightcheck, (www.markzware.com) both of which work on Quark Xpress, PageMaker, and Illustrator documents among others. Preflight Pro 2.1 is a Mac OS only product, whereas Flightcheck 3.6.1 is also available for Windows.

Preflight programs analyse your document page by page and then produce a report of possible problems. You can then go back into the document, put things right and run the check again, repeating this process until you're satisfied everything's OK.

For those who regularly produce four-colour artwork for commercial printing, preflight software is a worthwhile investment. But for occasional jobs and users of unsupported layout applications it's the hands-on method. Most colour production disasters can be avoided using a simple checklist prior to copying the files to disk and sending them to the printer. Here I've detailed the most common pitfalls. Inevitably you learn from (mostly bad) experience, so it

THESE PREFLIGHT CHECKS COME WITH IN-FLIGHT SOLUTIONS – A REAL BONUS

always pays to develop a good relationship with the printer – their knowledge may help you avoid an expensive mistake before it happens.

1 What happened to the colour?
Most colour output problems are a result of an error in the specification of CMYK process colours and spot (Pantone) colours. Typically, spot colours may be defined as CMYK and vice versa, in either case colours won't print as you expect, either because a CMYK colour appears on an additional spot colour plate, or a single spot colour is split into its CMYK constituents.

Check all the colours in your document to make sure they are correctly specified. If your document contains .eps graphics – say, from CorelDraw or Illustrator – you will also need to open and check these. Spot colours must be named in exactly the same way in the draw application as in your layout application, or you will end up with two different colours. An easy way to check that you've got everything right is to print the separations to a mono laser printer, checking that everything is on the right plate and that you have the right number of separations.

2 I can't read that coloured text
Take a quick look through your document and make sure there is no small type (less than 9pt) or thin rules made up from CMYK process colours. CMYK colours are screened to produce the percentage tints that make them up and small type and thin rules will break up and look fuzzy. Even slight misregistration of the plates on the press will exaggerate this with horrible results.

3 My colour pictures are in black and white
RGB images will, in most circumstances, print as a greyscale on the black plate. The only way around this is to open and check all your pictures in an image editor and convert them to CMYK if they are RGB. If there are a lot of pics, a random check on some may be sufficient. Alternatively, if your image editor has good scripting features you could write a script to open a folder of pics and convert them all to CMYK.

4 My duotones look muddy and horrible
You have set the second duotone colour to print with the same screen angle as the first, so the second colour dots have been printed directly on top of the first colour dots.

Questions & *answers*

Q I read your article on 'Stitching' with interest. I would like to try this and would be interested to know if there are other programs which will perform 'stitching' as Corel Paint 9 is expensive to be used for just that one feature.

EDDIE
DUKE3D1997@AOL.COM

a Yes there are, try PhotoDeluxe Home edition 3 (£35), MGI PhotoSuite 3 ((£42.55) or Ulead PhotoExpress (£37.50)

Q I have seen adverts in a US magazine for a program called Canvas. I believe it is currently in version 6, and is created by a company called Deneba. From the way the company advertises the product, it would seem that Canvas can do everything that Photoshop, Illustrator and Quark Xpress are able to do, and more, all in one box. I would be interested in anything you could tell me about this product.

MIKE GRIMSHAW

a Canvas does indeed combine vector graphics, bitmap 'sprite' effects, typography and layout in one package. Version 7, which is just out for Windows and Mac OS, introduces sprite layers and lens effects. There is a demo at www.deneba.com.

5 My pictures look bitty and broken up

There are three possibilities here. The first is the resolution is too low. As a general rule, your scans need to be twice the pixel resolution of the line screen. Typically, printing with a 150-line screen means your scans should be 300dpi at the output size. The second possibility is the picture file is missing and the low-resolution preview image has been used in its absence. Lastly, .eps bitmaps placed in Quark picture boxes with no background colour may appear jagged along contrasting edges. The solution to this is to change the background to white.

6 Bitmapped fonts

Type 1 postscript fonts require the PostScript 'printer' font to be present at output as well as the screen font used for display.

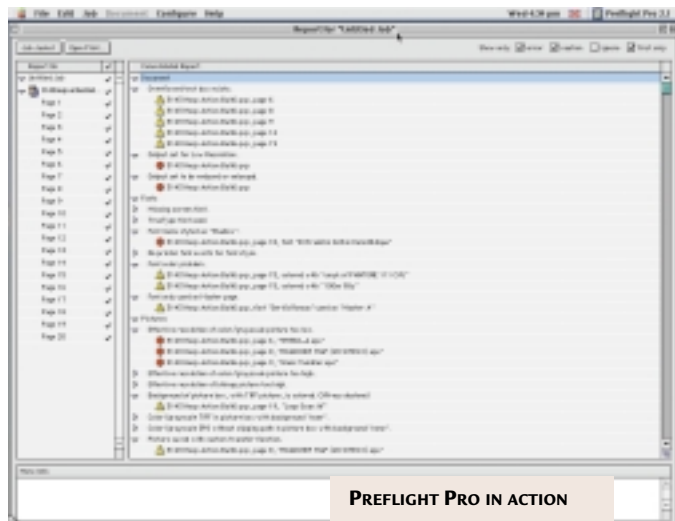## 7 Fonts do not appear as expected

Type 1 fonts that have had a style applied may not print as expected, depending on the availability of printer fonts. For example, if using a font with a variety of weights and you embolden a roman face from the style menu it's a toss up as to whether you'll get medium, book, bold or extra bold. The solution is always to use the menu font. A font menu utility such as Adobe Type Reunion or Extensis MenuFonts which comes with Suitcase will make this easier.

8 My pages are in the wrong order

Most people lay out their spreads 'to

PREFLIGHT PRO IN ACTION LISTS POSSIBLE PITFALLS IN YOUR DOCUMENTS, HELPING YOU AVOID COSTLY MISTAKES

view' ie as you would read them in the finished document, but a printer needs them arranged so the printed sheets when folded, trimmed and stitched together, appear in the correct place. This process is called imposition. With large documents it can be a complicated arrangement, but at it's simplest it means that in, say, an eight-page document the pairings are pages 8 and 1, 2 and 7, 6 and 3 and 4 and 5. You don't necessarily have to do this yourself as the printer can carry it out, but supply a stapled together 'dummy' of your document that shows the page layout.

This list doesn't by any means cover everything. But you can protect yourself against disaster by adequate proofing.

First proof your document on a mono printer and print separated colour plates. Then produce digital colour proofs on a calibrated colour inkjet. Your last chance is to carefully check over the film and produce Cromalin or Matchprint proofs from all, or at least some sample spreads.

You can get the printer to produce 'wet' proofs on press using the paper your document will be printed on. This last option is the most accurate, but it's also expensive and, should things not be right, costly to change as new film and plates will be required. You don't, of course, need to take out all these insurance policies, any one of them, in addition to the first, should cover you.

Lastly, when you supply the job to your printer make sure to pass on as much information as possible, even if this has previously been supplied for an estimate. If you've

As a rule, your scans need to be twice the pixel resolution of the line screen

carried out a thorough preflight, obtained proofs and provided your printer with all the details, you can look forward to a trouble-free production.

PCW CONTACTS