

VENDORS ELABORATE ON CHECKLIST POINTS

Preflight has become part of national electronic prepress jargon. Discounting the obvious tongue-in-cheek exaggeration, the concept is a superb analogy. A systematic file check by the originator before delivery to a vendor, plus a systematic examination at the vendor's before a file is scheduled for production is essential. Pilots go through their preflight routines because their lives depend on it. For printing customers and their vendors, time and money, the lifeblood of business, is at stake.

Electronic prepress is supposed to be easier, faster, and cheaper. Productivity is supposed to soar.

- If so, then why do procedures for checking files normally take longer than the traditional checking of artboards?
- Why do printers and prepress houses have such detailed forms to fill out with each file submission?
- What does it take to get a simple disk airborne?

IT'S ALL IN THE PROCESS

In essence, digital files, which are really electronic mechanicals, require a new organizational process. Once that process becomes routine, then electronic prepress begins to fulfill its promise.

One caveat, however, is that even a superb process cannot overcome the quirks of individual software applications. That's where discussion with individual vendors and belonging to user groups helps. Also, user feedback to software developers spurs industry-specific improved revisions.

The Preflight Checklist presented on page 20 was developed through a consensus of PINC members, people from printing companies, prepress houses, and service bureaus who deal with electronic mechanicals on a daily basis. Most of the points are self-explanatory.

While sophisticated file generators may understand all the whys behind these wherefores, some of you may appreciate more discussion.

Vendors report that it is often the simplest things that cause a job to crash, if it takes off at all. Across the board, prepress vendors say that what most frequently keeps them from outputting a file is:

- Missing element(s) or particularly linked or source files and fonts.
- Following that, a lack of preprepared laser proofs for color work,
- And unnecessarily complex graphics.

GETTING IT ALL TOGETHER

In the old artboard days, production departments had methods of checking to be sure that everything necessary to produce the job got sent to the printer. People routinely did things like counting all four pieces of a separation. Making sure that everything is on a disk is just as basic.

Vendors really do need both the files prepared in the application and the source files. Application files are the original files created from the program that will be output. QuarkXPress, InDesign, and PageMaker files are typical, but by no means exclusive. Source files are usually the graphics files, such as those created in Illustrator or Photoshop, associated with the application files. These are the necessary linked files that the application file will use when printing to the imagesetter.

To help you make sure everything is present, some page layout programs have "collect for output," "gather for service bureau," or "export prepress file" functions. In PageMaker, this option to include files for remote printing can be found in the "Save As..." dialog box. In QuarkXPress and InDesign, the options can be found in one of the menus. Another method is to go to the linked graphics listing and chase down the files.

Unquestionably, the best way to check your submission is to run it through a preflight software program like Markzware's FlightCheck or MarkzNet or similar products from other software companies. None of these applications are expensive, and they save you time, money, and hassles with your vendors.

If you have not upgraded your workflow to software preflighting, the next best way to verify that all the files are present is to first print a directory of the folder or disk, and use

this to compare to the gathering function. Then, take the disk that will go to the vendor to a computer that was not used for the project and open the document. Recheck against the printed directory. If it's all there, it's all there.

REMEMBER THE BINDERY

Few designers would have sent artboards to the printer without marking their images "full bleed" and having their separations sized accordingly. However, another basic element reported as frequently missing from electronic mechanicals is an allowance for bleeds outside the crop area of the page(s).

Called overwork in the Preflight Checklist, a bleed allowance means an extra image area that extends beyond the crop marks. It's created by having the image extend past the trim edge of the document page, usually 0.125" to 0.25", depending on the kind of press that will be used. Just like the old days, overwork provides for a slight margin of error during the trimming/binding process.

A WORD ON FONTS

On the Preflight Checklist, two items deal with fonts. Originators are asked to include all display and printer fonts used in the file plus complete fonts for typefaces that have been modified from library faces. It should become a habit to include all fonts with every job, including fonts for placed graphics. Customers should also be sure that their vendors have the fonts they are designating.

At this juncture, font licensing and what constitutes copyright violation is under discussion throughout the industry. The jury is still out on the best way to ensure fair compensation to type designers and manufacturers without creating production burdens and unreasonable additional costs to consumers. The safest way to avoid potential legal problems is to be properly licensed for fonts and to use a vendor who is also properly licensed for the same fonts used in the file.

Names of specific platforms, graphic and page makeup application programs, and page description languages are the registered trademarks of the originating companies.

TOO MUCH OF A GOOD THING

Ironically, vendors also sound a minor note about making sure that everything is included on the file: that is, extraneous files should be removed from the transporting media. Prepress service users, it seems, habitually submit high-capacity media with outdated working files or a lot of older files that don't need to be output. Obviously, this can cause needless confusion plus delays in locating specific files for output.

Compare this to bygone days. Certainly, frugal designers reused artboards, but they always carefully removed old art; nor would designers have dreamed of including preliminary sketches with the final illustration. If for economic or housekeeping reasons, you have to leave old material on media, then be sure that the vendor has a clear listing of the files to be output.

AREN'T PROOFS MADE AT THE VENDOR'S?

Prepress proofs, that is, interim proofs, bluelines, and contract proofs, are purchased from the vendor and are as much a part of the normal workflow in print production as they ever were. Today, however, a large majority of prepress vendors require at least a marked-up composite laser proof of a file

before accepting it for output. And, to be useful, this proof must be the final version of the file.

Remember, this is the only way to obtain a visual guideline as to what you expect. Bringing a project up on a monitor does not provide the necessary technical information.

In addition, printing out a laser proof from a PostScript laser printer is a basic step in internal quality control for the originator. If a file will not print on a laser printer, it's highly unlikely that it can be RIPped and output to an imagesetter.

Originators who do not have access to a PostScript laser printer should schedule time to purchase laser proofs and make any necessary alterations to the file(s) before their final deadline for project submission.

In multicolored work, whether it's spot color or process color, pre-separated laser proofs are vital as well. Color separated laser proofs accurately show what colors are going to print and what elements are going to print on which plate.

Designers may inadvertently place an object on the wrong color layer and won't know it unless they create separations and see that it is missing. Color photos that are not saved correctly will only print on the black layer, and this will not be evident on a composite proof. Of course, since the large majority of

pre-separated laser proofs are black and white, originators should indicate the appropriate color on each separation.

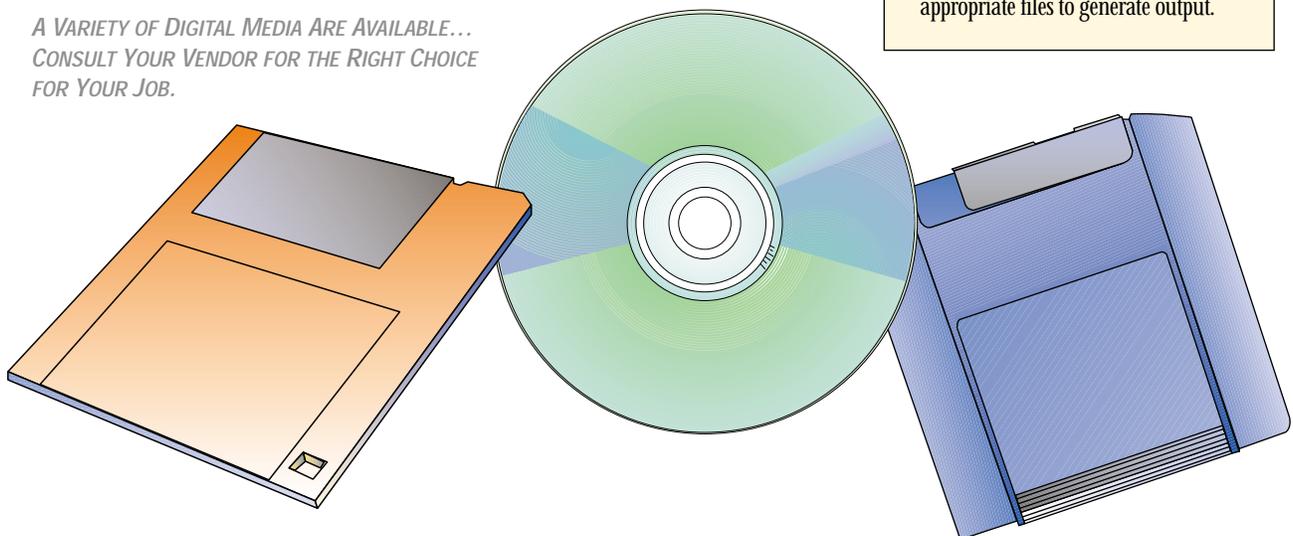
Frequently, a file without proofs arrives at a vendor's and prints more than the number of colors designated. One PINC member tells about receiving a two-color job that would have printed as 42 colors if he had not edited it. Unfortunately, horror stories like this are common, and costly.

NOT QUITE HOME FREE

While laser proofs that are marked with instructions for the vendor are good indicators that a file will RIP, they are not the last word. For example, under the headline caution "Some things that don't always appear as they seem," the Preflight Checklist notes that laser proofs of the same file do not always output the same way on an imagesetter.

Note: Although the word imagesetter appears throughout this preflight discussion, the industry is moving to computer-to-plate or computer to digital press workflow. To emphasize that point, we've added the words *or platesetter* in one instance. But it could be used in every instance. Please note that each and every one of the caveats in this article applies to plate-setters and digital presses as well as imagesetters. Imaging devices need appropriate files to generate output.

A VARIETY OF DIGITAL MEDIA ARE AVAILABLE... CONSULT YOUR VENDOR FOR THE RIGHT CHOICE FOR YOUR JOB.



Vendors point out that laser printers are far more tolerant of mixed image formats than are imagesetters. The PICT format, for example, is a major problem and considered an unacceptable format for imagesetter output. Laser printers also include Quick Draw drivers since a lot of business drawing programs are Quick Draw based. These drivers are not built into imagesetters. When translated to a PostScript RIP, the images may shift and distort. Furthermore, the laser printer may not use the PostScript Level II or PostScript 3 commonly used in imagesetters.

Another interesting example from a PINC member concerns hairline rules. A laser printer, remember, usually has a resolution significantly less than that of an imagesetter. Because of the way PostScript deals with some things, it is possible that some elements, such as rules, may look terrific on laser printer output and not show up at all on imagesetter output – entirely the opposite of what most people would expect.

Electronic printing devices will output line rules only as thin as the resolution the output device is capable of achieving. Any rule or image finer than that resolution will default to the minimum thickness that the device can produce. For example, if the design at the 100% size calls for a hairline rule (1/4 point or 0.0035"), the 300 dpi printer will print it as intended since 1/300 of an inch equals roughly 0.0033". However, should the image be reduced to 25% of the full size, the laser printer will only print it at the resolution it is capable of handling. So the rule that should measure 0.0008" would print out as 0.0033".

On the other hand, an imagesetter, which can achieve resolutions as fine or finer than 1/2540 of an inch (0.0004" or over eight times that of the laser printer), would be capable of imaging the line but it might be virtually invisible, might not record on film, and certainly would not match the laser proof image. Care must be taken therefore in creating images to take these output factors into account. You should not rely on the fine line laser printer images to reproduce exactly the same on imagesetters.

SUBSTANCE OVER STYLE

Type may also yield unwelcome surprises between laser proofs and imagesetter output. Designers who want an accurately laid out project should apply the correct version of the typeface to properly represent the spacing and character width. That's one reason why the Preflight Checklist calls for not using type style selections like bold or italic from a program's Style menu rather than designating the actual font from the Font menu.

Furthermore, not all typefaces have been designed to take advantage of the Style menu feature and will not respond to bold when printing. This is because a bold version of the printer font does not exist. And, even if it appears bold on the screen, it won't print that way on the high-resolution output device. A laser printer is designed to artificially bold such a face by double printing it to make it fatter. This may look acceptable on the laser proof, but when output on an imagesetter, it will appear that the letter is printed twice, one on top of the other.

Vendors do make the point that there is nothing wrong with using the Style menu to select type styles if there is no other option available in the program, with the caution that the type style must be actually present as a font. The Macintosh can simulate a bolded font on screen but the imagesetter will not be able to print the type style without the actual printer font.

Finally, for originators who appreciate precise typography, how a font suitcase has been harmonized comes into play here. Harmonization is setting the font to be selected when a style variation is chosen. Some font families consist of many different weights of type: light, demi, demi-bold, heavy, etc. Harmonization can make it possible to use a demi weight font, choose a style of bold, and get demi-bold. Someone else can harmonize the same font to generate bold instead of demi-bold. Selecting the desired font directly ensures that font is used.

WHAT'S WRONG WITH COMPLEXITY?

When prepress vendors talk about files being unnecessarily complex, they can mean several things, some of them application specific. In general though, a file may take an extra long time to RIP, thus adding to the cost of the project, when a simpler set-up could have produced the same results.

For instance, the deeper a graphic is embedded, the more difficult and time consuming it becomes to print. On the other hand, there may be just too much of a good thing, like anchor points or dots per inch in an image that require lengthy RIP time.

Experienced users find that with any digital file, simple is better. A suggestion from one vendor is to limit anchor points by only using the number absolutely necessary to get the job done correctly. If an autotrace feature is used in any of the programs, modify the resultant drawing.

NEED HELP?

Finally, and perhaps most important, electronic prepress departments welcome consultations before a project gets under way. Many vendors also have instructions posted on their websites, especially for FTP delivery. Others offer recorded directions over the phone or will happily email, fax, or mail them to you. Like printing presses, electronic imaging equipment has different characteristics and different requirements. Methods that are fine in one software application may not work in another.

Pilots check weather conditions and submit a flight plan before they start their final preflight checklist. When file originators pull away from the gate, they will want to be equally prepared for success.

PINC wishes to thank the many members who contributed their time and expertise for this article.