Ground Controls Images

The Images area offers you a way to ensure that the images placed in your document are desirable and can be acceptably printed.

Type
Type
Check the desired picture type boxes to ask FLIGHTCHECK® to alert you when any image is of that type. For example, if you do not want any JPEG compressed images to be used (and especially if your output device cannot support JPEG images), then you should check the JPEG box. The item “Other” represents any other image type which is not listed.

PC
Check this box to be alerted when any IBM-PC images are being used.

OPI
Checking this box will instruct FLIGHTCHECK® to ignore lo-res images, and instead check the hi-res image (if it can be found). Unchecking this box will cause the hi-res images to not be displayed.

Mode
Mode
Check the desired picture mode boxes to ask FLIGHTCHECK® to alert you when any image is of that mode. For example, if you do not want any RGB images, then you should check the RGB box. (Please see the previous section regarding Ground Controls Colors and Non-CMYK/Pantone for more information about using RGB models).

File Status
Missing
Check this box to ask FLIGHTCHECK® to alert you when any image file is missing. This obvious problem often results in the application sending the low-resolution preview of the image to the printer if the original source file containing the high-resolution data cannot be located.

Modified
Check this box to ask FLIGHTCHECK® to alert you when any image file’s last modified date does not match the date of the link data saved within the document. If the image on disk does not match the same modifed date as the one recorded inside the document, there is a chance that the image is not the same one and possibly will not print as one would hope. For example, if the original image contained white areas and you set the application to create an automatic text runaround on the boundaries of the non-white area, it is possible that the new image could have different non-white areas and so the text might naturally flow differently than with the original image, in which case you wouldn’t want to blindly open the document and print without first updating the links to the current images.

LZW/JPEG
Check these boxes if you want to be alerted if any image has been compressed as JPEG or LZW. While most output devices can support LZW compression, some cannot support JPEG.

Stored
Check this box to ask FLIGHTCHECK® to alert you when an image is embedded within your document file. In the case of a PageMaker document or an EPSF image which contains an image, the embedded image clearly aids in guaranteeing the document can be printed, seeing how the únnot possibly be considered “missing”. However, new problems could arise if for some reason the Service Bureau needs to edit the image, they may have a difficult time extracting the image out of the document file.

Not Included
Check this box in order to have FLIGHTCHECK® alert you when an EPSF file contains only a pathname reference to another image. For example, while inside an application such as Illustrator you can place an image and when saving the document as an EPSF you can elect to “not include” the placed image.

This is ok for Illustrator, but if you then place the EPSF on a QuarkXPress document page, you need to realize that when printing the document the print device will not be able to find the “not included” image file because the device may have no concept of a file system capable of locating such an image. Therefore, for checking Illustrator files this would not be an error and you could leave this box unchecked, but for other applications you would most definately want to keep this checkbox selected.

Nested
Check this box to ask FLIGHTCHECK® to alert you when an EPSF image contains another image. Similar to the “stored” function, this is not always considered a real problem, other than it is sometimes impossible to be able to extract and edit the embedded image, but the potential problems do in fact exist and are compounded by the fact that when an image within an image gets into multiple layers (called “plys”), processing time increases, and in extreme cases can cause the output device to bog down or run out of memory (similar to problems encountered when “grouping” too many objects).

Image Box
Suppressed
Check this box to be alerted whe $age or picture box has been suppressed from printing. If you think about it, any object that will not be printed can be completely ignored if it also contains other problems, such as an unwanted RGB image or a text box containing characters referencing a missing font, unless of course you actually meant to have it printable, in which case FLIGHTCHECK® will bring you a sigh of relief when it discovers this fact.

Off the Page
Check this box to be alerted when any image is outside the printable area of the page, or is “on the pasteboard”. While this by itself does not constitute a true preflight error, such an image can add needlessly to precious disk space, but more importantly it can affect the transmission time for sending files as well as adding time to print the job.

Fill “None” Pop-up Menu
You can use the Fill “None” pop-up menu to select which specific images you want checked by FLIGHTCHECK® that reside in picture boxes containing a background fill of the special transparent color “None”. Note that you can conveniently select either “All Images” or “No Images” for either EPS (pixel-based EPSF images) or TIFF image types. (Please see the previous section “Image Attributes Icons” under FlightChecking Images for a discussion of the color “None”).

Clipping Path
Check this box to be alerted when any pixel-based image resides in a picture box having a background set to “None” and therefore may require a clipping path to achieve optimum output. Needless to say, vector-based EPSF images will always be excluded from this determination.

Bitmap Frame
Check this box to ask FLIGHTCHECK® to alert you when any image resides in a picture box which has a custom Bitmap Frame or Border. Most custom bitmaps print at an unacceptably low quality.

Box Rotation/Skew
Check these boxes to be alerted when a picture box has been rotated or skewed. Again, altering a picture box can indeed distort its contents to an unwanted degree, not to mention adding processing time, so it is advisable to avoid rotating or skewing a box and to instead correctly edit the source image to achieve the same effect.

Contents
Image Scale/Rotation/Skew
Check any of these boxes if you want to be alerted when any image has been scaled, rotated or skewed. Scaling is by far the more serious picture attribute to contend with. Rotattion and skew can alter the way an image “looks”, and the only real drawback is added processing time, but scaling becomes an extremely critical factor in determining the output quality of an image. A too low or too high resolution could, of course, be scaled up or down to force it to be within the acceptable effective resolution range when compared to the output line screen, but these raw numbers alone may not prevent an undesirable printout. It is therefore far better to return the image back to the application

which created it and change its resolution or to modify the image in such a way so that it can be placed on the document page at 100% scale with no further rotation or skew applied.

H/V Flip
Check this box to be alerted when the contents of a picture box has been flipped horizontally or vertically. Flipping by itself may not constitute a real error, other than adding processing time, unless of course the box has its contents flipped by mistake, in which you will be happy to have FLIGHTCHECK® point this out.

Image Styles/Contrast
Check this box to be alerted when any image has had a Style or Contrast applied to it. Sometimes when a 1-Bit image which has been “colorized”, or has had some sort of contrast applied, is sent to certain printers, the color information might be ignored or possibly even discarded, especially if OPI (hi-res image substitution) is employed. In this case, it is better to return to the application which created the image and to apply the desired color to the source image.

Picture Trap
Check this box to be alerted when a picture trap has been set.

Halftone Screen/Transfer Function
Check these boxes to be alerted when any image contains either a Halftone Screen or a Transfer Function. The reason why you would want to know about these special functions is because these built-in routines are essentially postscript commands that will alter the pixel data as it is being sent to the printer, with the end result possibly being a printout you do not expect.

Channels/Layers
Check any of these boxes to be alerted when an image contains extra channels or layers.

Resolution
Effective Resolution Factor
Check this box to be alerted when the effective resolution for any image is not within the specified range (as entered into the Minimum and Maximum edit boxes). This is a very critical and extremely important function of FLIGHTCHECK®. Once FLIGHTCHECK® scans an image, it then compares the image resolution to the output line screen and will post an error if the image resolution is not compatible. (Please see the previous “Default Halftone” under the Page Setup section of Ground Controls). It is commonly accepted that the image dpi (dots per inch) should be between 1.5 to 2.0 times the line screen in order for the output to be acceptable. Lower resolutions cause an undesirable printout due to the fact that a lesser amount of pixel data will need to be “stretched” into a larger spatial area. Higher resolutions do not gain in quality, but in fact may lower the output quality as some of the pixel data will be literally discarded in order to fit the higher quantity of image data into a lesser spatial area on the page. Therefore, you can instruct FLIGHTCHECK® to warn you when an image resolution does not quite fall into the allowable range.

For example, if the halftone screen is 150 lpi and you enter a maximum effective resolution value of 2.0, then any image which has a dpi greater than 300 (in other words 2.0 times 150) would be an “error”. Keep in mind that the effective resolution calculation will always take into account any scaling that has been applied to the image within the application.

Factor/DPI Menu
The Factor/DPI pop-up menu allows you to choose between specifying the effective resolution range in terms of a factor, such as 1.5 to 2.0, or an actual DPI. For example, if the line screen is 150 lpi, and you still want the range to be 1.5 to 2.0, you can enter DPI values of 225 to 300 (1.5 times 150 and 2.0 times 150) into the Minimum and Maximum edit boxes to achieve the same effect as you would by selecting Factor.

Bitmaps
Enter the minimum and maximum resolution values to check Bitmap images.

Flatness
Enter the minimum and maximum resolution values to check images which contains a flatness value.