Scaling Your Plans

There are two Adobe applications that could do the job, one you have to pay for - Adobe Acrobat - and one that's free of charge - Adobe Reader DC

Both applications can do the job of converting pictures (jpg, tiff, bmp) to pdf format using measurements and print scaling.

The process starts with conversion of the image and other files into a pdf file. You can choose to convert a single or multiple files, or all files in the selected directory:

Assuming you have a number of image files on your PC, select 'Create PDF from Multiple Files' and this window will open:
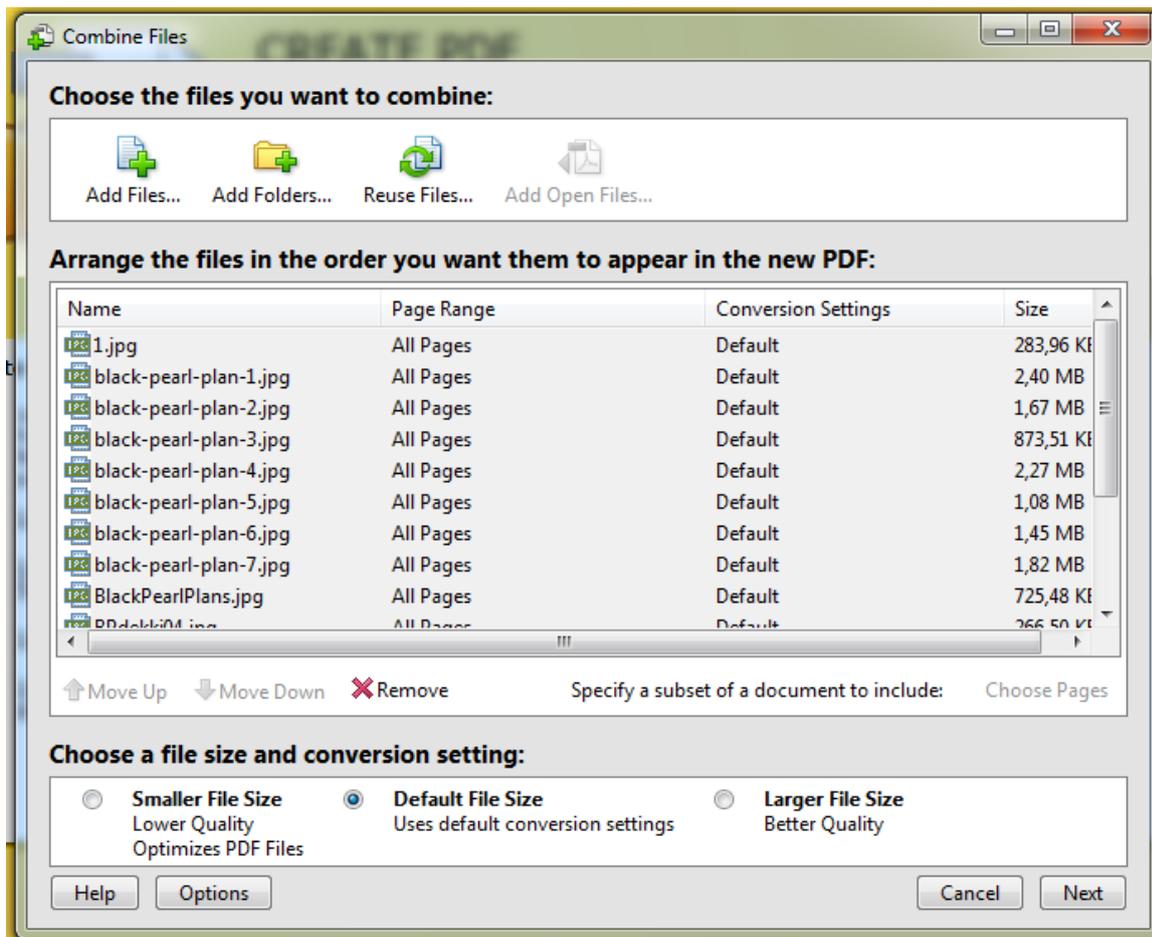
The process is straightforward and will create a single pdf document containing all the plans, pictures, photos drawings and text files you selected.

Once the document is created, you can open it in Adobe Acrobat, or Acrobat Reader.

Select the 'Tools' menu, find the measuring menu and open it:
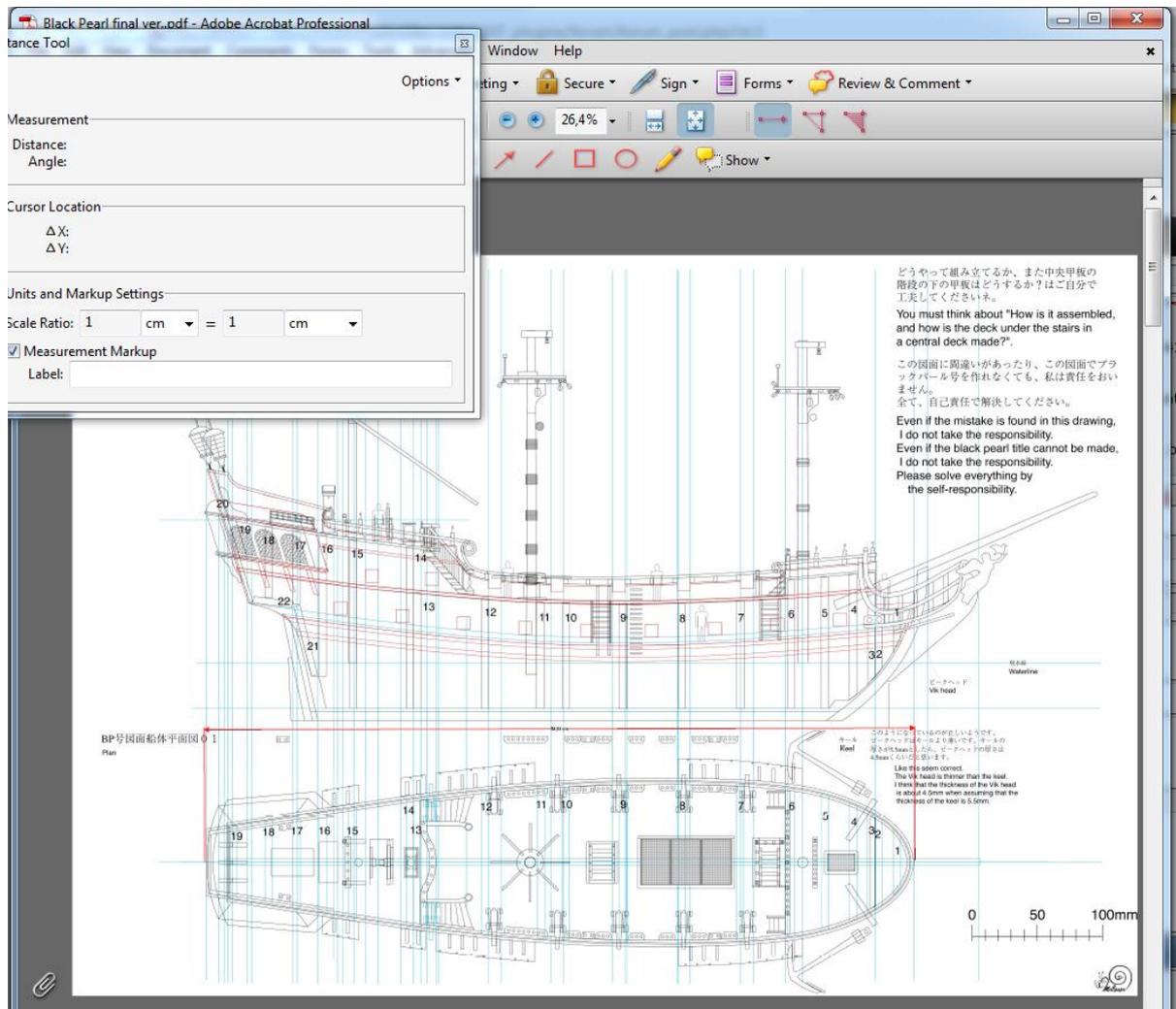

From the screenshot above, it is clear that you could draw the dimension lines and at the same time set the scale factor there - so if you know the exact measurements of the real ship , you could use them in this scale/measuring tool to quickly calculate measurements in inches or millimeters in the model plans if printed at 100% of the original drawing size. The red dimension lines and the length shown were added by this measuring tool so you could also draw all the measurements on the plans using the measuring tool and then save them in the plans.

Now if you want to scale your model up or down from the original plan size, you can do it by calculating the desired scale ratio between your project and original measurements in the pdf file and use that scale factor in the print menu.

The Print menu should be set to the "tile big pages" option in Adobe Acrobat or "poster printing" in Acrobat Reader. If you leave the scale as 100% it will print multiple fragmented sheets in 1:1 scale to make up the plans.
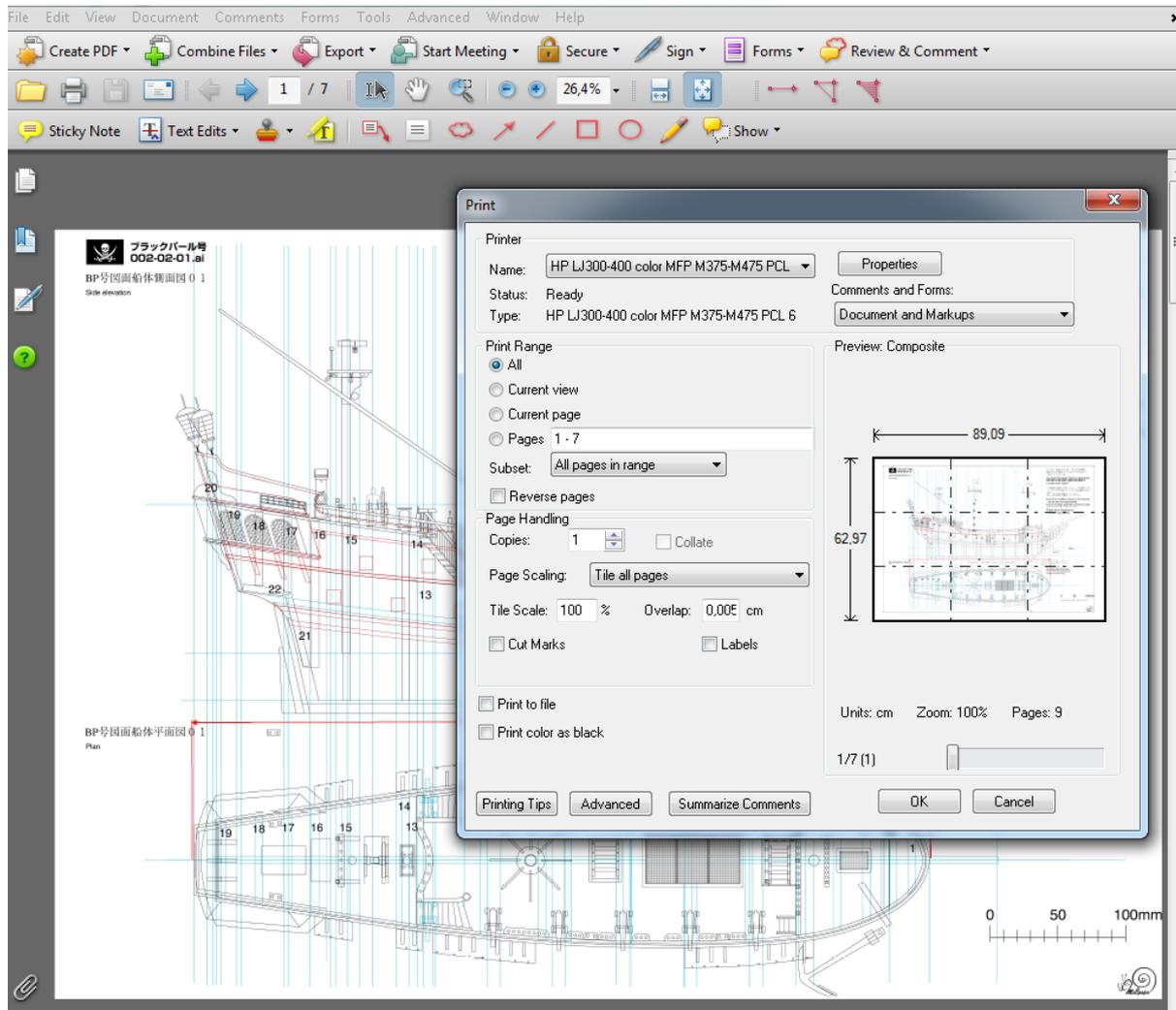
If your plans are, for example, showing the model at 1:72 scale, and you would like to build at 1:48 scale, then you simply calculate the ratio 72/48 and use it as the scale factor in the tile scale menu. The number of sheets and their arrangement is shown in the picture on the right-hand side of the screenshot. You could also change the overlapping region size which can be used to cut / stick and glue creating big sheets of A1 or usually A0 / B0 size.

Don't forget to scale all the pages by the same scale factor!

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12/03/2019