

Tissue Printing With InkJet Printers

By Steve Gardner, from the Free Flight Mail List, as printed in an old issue of SAM 86 Speaks, Dan O'Grady Editor

I have outlined my methods for tissue printing here before, but it has been a while I guess. This method has worked for me for years and I have gotten to the point where all I buy anymore is white tissue. I refill my ink cartridges and so the ink is very cheap and even when I need a sheet of simple red tissue I print it.

If you try to put a great deal of ink down on tissue just taped to the carrier sheet, like if you are after dark green or black, the tissue will swell and the print head will smear against it. I get around this by using #77 3M spray glue to attach the tissue to the carrier sheet as follows:

1. Use a sheet of good ink jet paper so that the stiffness is there. Lay this sheet flat and very lightly mist a coat of the glue onto it. Make sure that you get total coverage but use as little glue as you can to get it. I spray about 18 inches above the paper and for less than a second.
2. Take the sheet and carefully stick it to a scrap of cardboard then immediately peel it back off. The remaining amount of tackiness on the paper is perfect for the tissue.
3. The tissue is taped down flat so that there are no wrinkles. A full sheet will take four sheets of carrier paper if carefully placed. When you peeled the carrier paper off the scrap cardboard it took on a curl, this curl makes putting the paper onto the tissue easy — just start an edge and roll the curled carrier sheet onto the tissue. You can get pretty near perfectly attached sheets this way. Trim the tissue to the outline of the carrier sheets and you are ready to print.
4. I make up lots of sheets at the same time for any future projects. There may be some small wrinkles or bubbles in the sheets but unless they are pretty large the tissue will print fine. I use an HP722 printer and can print a very large number of sheets with a given cartridge before needing to refill. Different tissues will need different amounts of ink, so you may have to play with the quality settings. I most often use the Plain paper setting with the Normal quality setting. If you are trying for very sharp lines of certain colors (like the red) you may need to go to the draft setting. If you are after a very bright color like neon orange you might need to use whiter tissue like Esaki. I usually use silk tissue from the local art paper supplier. It has no shiny side and is a bit lighter than Esaki and it prints perfectly.
5. Once the tissue is printed you can easily get it off the carrier sheet with naphtha. This will not bother the ink or tissue at all and cuts the glue like water cuts sugar. The naphtha will dry off the tissue in less than a minute, and you can use the tissue right away. I use a glue-stick, yellow glue a bit thinned, or dope to attach the tissue. Unless you fly indoors you will need to use Krylon Kristal Klear or dope to lock the ink down and give it some water resistance. Water is the only thing I have found that bothers the ink, dopes and other thinners have no effect. To water

shrink this inked tissue I use steam or the mist from a perfume atomizer. There must be NO drops of water, just the very finest of mists. Steam is safest.

6. This method gives the most wonderful results! I used to avoid complex paint schemes, but I now I hardly ever build a simply colored model. One other very nice feature, if you blow a motor or otherwise damage the model's tissue where there are colors or graphics you can print a perfect patch for the damaged area. This is nice when a broken motor reaches out and obliterates the nifty hat and ring emblem on the side of your new SPAD 13. You can even print an entire spare set of covering for an important model/contest.