Making Flags

Models need flags, but where are you going to find just the correct ones, in just the correct size, for your model?   It is impossible, right? So I make my own, and have developed a process for making any flag for which you can find an image on the internet, or draw yourself. I sized what I needed, based on photos of flags flying on *Langley*.   Using an image of the forty-eight star American flag I found on-line, I reproduced it in the size I needed at my local copy center.   I then used the copier selection that allows you to make multiple images on a single sheet. That feature is available on most copiers, and I was able to repeat the flag image eight or ten times on a single sheet. Many copiers also have a mirror image selection, so used this to get a reverse image of the same sheet of flags. Now I had multiple images of flags on two sheets, one the mirror image of the other. Using iron-on transfer sheet materials available at many craft stores, I then made a full color copy of each sheet. I stapled the two transfer sheets with the images facing inward, being careful to align the sheets so that each flag was exactly opposite its mate.

There are two ways to transfer the toner to the cloth. I used to have a copy center handy that had a large hot-press for transferring images onto T-shirts. I would position a thin white piece of cloth between the two stapled decal sheets and they would press it on their machine. The high temperature transferred the toner to the cloth and great flags would emerge. I have no place like that available now, so I use a hot iron, with a trial-and-error method to find a good temperature setting to do the transfer. In case I don't have it exactly right, I usually do one or two flags at a time, not the whole sheet. Cheap white handkerchiefs from dollar stores work well as the cloth material. They are made of very thin material, and the weave is reasonably tight. I have seen drafting material made of cloth that is thinner and more tightly weaved, but have yet to obtain any.

When I cut the flag out, I leave a flap of material at the edge of the flag to allow it to be attached to a halyard. I used to fold the flat over the halyard and sew it up. The result always looked a little clunky, as the double thickness, and my poor sewing skills, just plain looked bad. Myy new method does not require me to fold over the flap of the flag. Instead, I poke tiny holes at several spots on the flap, and push a very fine white colored stainless steel wire through. I have tiny beads, one of which I pressed onto the flag staff at the top, trapping the stainless steel wire "halyard." A drop of superglue secures it.   Sewing stores sell a sealing liquid that can be used on the flag edges to keep them from unravelling. In addition to the 48-star American flag, the *Langley* flew an ensign at the bow. The ensign was identical in look and size to the portion of the American flag that has the stars. I simply cut the stripes off a flag and it became the ensign.

Note: be sure to use a machine that copies using toner, not liquid ink. First, the color in toner lasts much longer than ink, because it is made of tiny plastic particulates. Secondly, with plastic toner you can shape the flag as desired. After the flag is mounted on the staff, a hair dryer directed toward it heats the toner, which softens. Try hanging a weight, such as a paper clip or a cloths pin, on the edge of the flag. Once you get just the wave you want, let it cool. Once cooled, the flag retains the shape. I like the look of a flag flying in a light breeze-a look that is very easy to get.
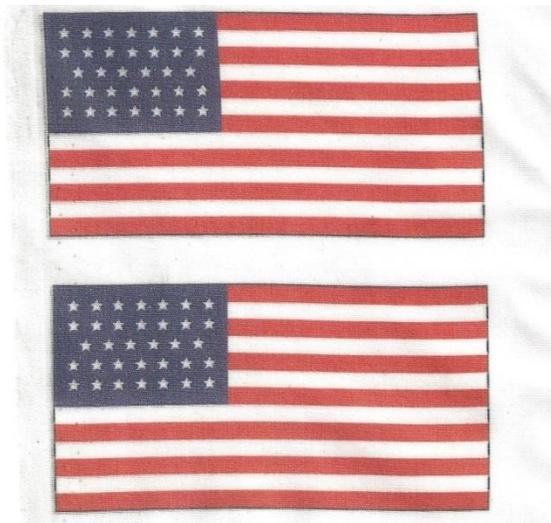
Image of two completed flags in a sheet made by a simple process using decal material and copiers. The flags shown here were not for *Langley*, which requires a forty-eight star flag. These flags were for a model I built of a Civil War ship; it required a thirty-four star flag.
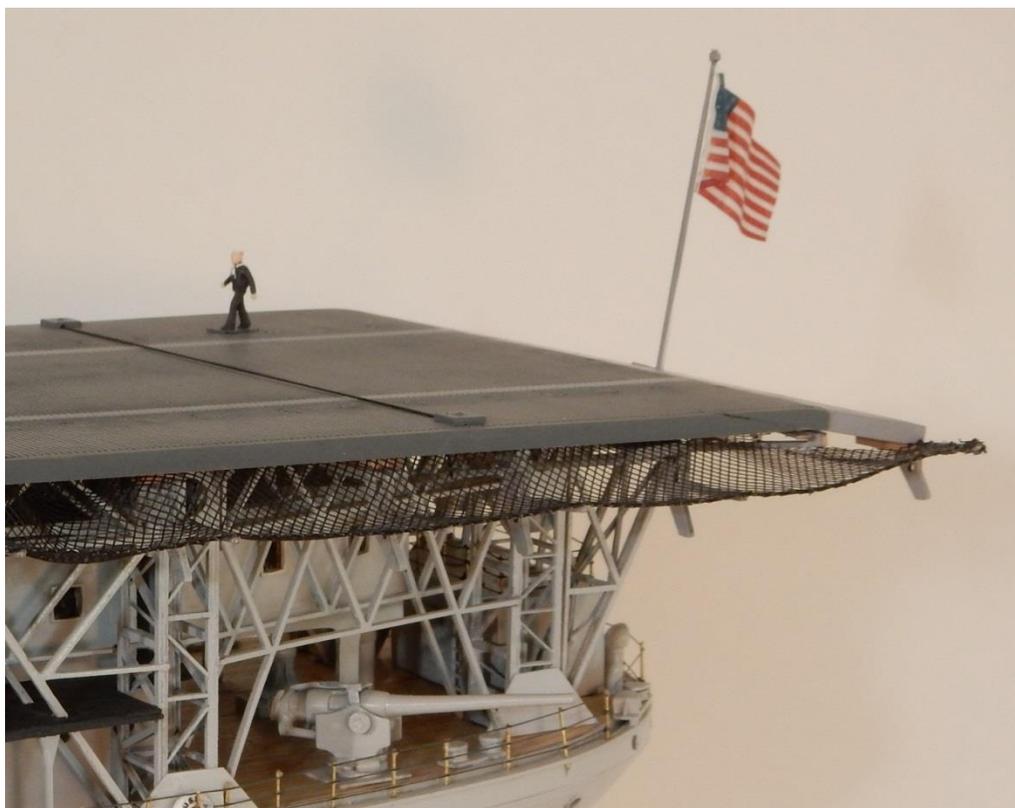
The stern of the *Langley* model with the American flag waiving in the "wind."