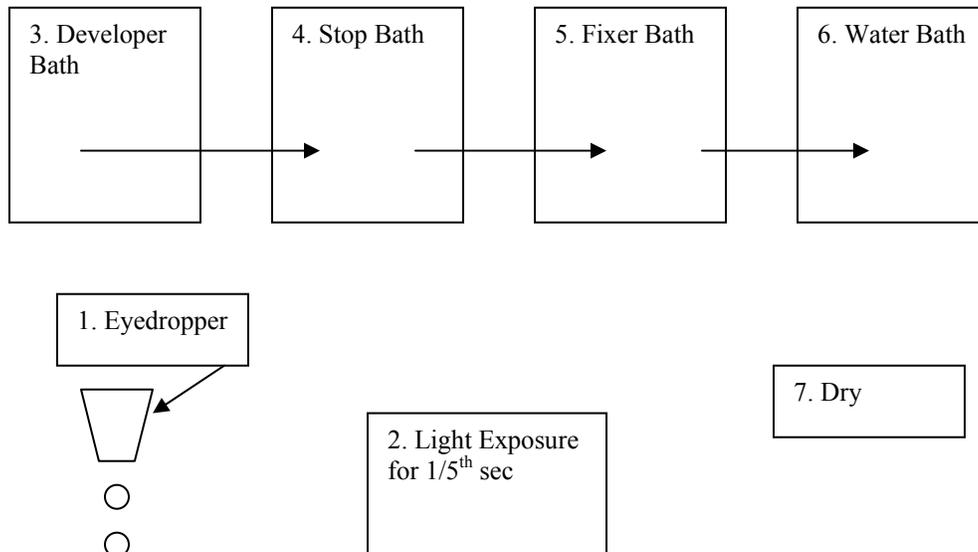


Firestars

This picture is the second of three group projects. For this project the group used professor Sweetman's idea of pouring fixer on unprocessed photo paper, exposing the photo paper to a small amount of light (from the light exposing machines in the darkroom) and then developing the paper as one would a photograph. The phenomenon viewed is how drops hit on paper and then, if the paper is lifted how the drops flow downward.

The flow apparatus used is a dropper filled with fluid (each drop approximately $1/5^{\text{th}}$ of a milliliter). First, an eyedropper is filled with fixer. The fixer is then dropped from about a height of one foot onto unprocessed photo paper. The paper is tilted to let the drops run off. The photo paper is then exposed to about $1/5^{\text{th}}$ of a second of light from the light exposing machines. The paper is then placed in the developer bin until the desired contrast is achieved, moved to the stop bath for approximately 30 seconds and then into the fixer bath for about two minutes. After the two minutes, the photo paper is placed in a water bath to wash off all extra chemicals. For a set up of the darkroom and the order in which processes are done, please refer to the sketch.



Note: Fixer is considered a hazardous waste because of the amount of silver in it. Spent fixer contains Thiosulfate which causes its own problems in remediation of the fixer due to its ability to fill in "holes" in the chemical make up of fixer. (<http://toxnet.nlm.nih.gov/> search for photo fixer)

The visualization technique used is a drop of fluid released from a certain height to create a rounded initial shape on a piece of paper. After the drop has landed, it is still in a slightly spherical shape because of surface tension. When the paper is picked up from one end, the drop begins to roll, depositing some of the fluid on the paper as it rolls to the edge. This rolling creates a thinning tail from the initial drop to the termination of it. The light used to expose the picture is $1/5^{\text{th}}$ of a second long at an F stop of 8 on the lighting machines in the darkroom.

There is no real photographic technique as this process is a direct process. The developing of the final product was performed by myself in the Art School's dark room. Some enhancement in Adobe Photoshop was performed to increase the contrast of the final product, as well as take out dust and scratches from the scanner itself. The photograph was scanned with an HP scanner at 300 dpi. The original photograph is approximately seven inches by nine inches; nothing was cropped in Photoshop. This size corresponds to about 2100 pixels by 2700 pixels.

I like the image because it looks almost like something that would be seen during an air raid or any other event in which flaming pieces of debris are scattering in the air. The only real physics shown of flow are drop physics and a little of rolling physics of fluid over a non-wetted material. I would have liked to have more original contrast, which could have been obtained by leaving the paper in the developer bath longer, however, it is difficult to see in low light—when I pulled it out of the developer bath, it did look black. To expand on this project, I would like to do a positive and negative of the same image, and have them be presented side by side for artistic aesthetics.