## **GITTERMANGALLERY**

## William Larson Fireflies

The Fax machine first caught my attention in 1969 with its ability to render a photographic image in high definition (for the time) and suitable for transmission by telephone to any remote location with a comparable machine. In essence, it transformed the image into sound by assigning a different audio tone to the various grey values of the photograph. More importantly, it transformed the image into a mediated electronic state where it was compatible with other electronically encoded information. From our current and informed vantage point it is reminiscent of our modern computing devices with their processes of scanning, encoding, sending and printing.

The machine I used to make these images was a Graphic Sciences Dex 1 Teleprinter – early fax technology. It was generally used by graphic artists to transmit text and images at any distance where two identical machines capable of both sending and receiving information were present, either side by side, in a "handshake" situation, or miles away. Private use of the machine at that time was virtually unknown. I first saw it in a demonstration in Philadelphia where a photograph of a well-known celebrity was sent 600 miles from Chicago to Philadelphia in six minutes. I was surprised by the quality of the output; I had expected a more primitive result.

The images were generated sequentially, with sound, music, text, voice and photographic elements transmitted to a single page (8.5 x 11") fragment by fragment. Process and apparatus are no strangers to photography and a system like the Graphic Sciences DEX 1 Teleprinter drew the photograph into a state of electronic compatibility with a range of sound and graphic elements, each with its own characteristics and distinct footprint visible on the final print. My first instinct was to remove the cover of the machine to explore the innate possibilities that the electronics offered. I placed assorted images and fragments of text in a clear plastic sleeve, flat and face up. The sleeve was then loaded onto the 9 x 4 in. diameter drum and ready for transmission. During the six minutes of transmission, the image was read by an optical printer and delivered by a stylus that burned the image into the special (and extremely stable) Graphic Sciences carbon paper. A spark was produced, hence the title "Fireflies."

The image was not static, but rather in motion throughout the process, making it possible to direct various parts of its architecture. I noticed that increasing the voltage changed the output of the image: the greater the voltage, the darker the burn, and I could manipulate this in real time. There were other possibilities that surfaced. For example, if the movement of the drum was slowed down manually during transmission, the image would be spread out of its coherent, readable state, drifting across the page in an unpredictable way. Likewise, when I played music or spoke through the phone extension another, distinct signal was layered simultaneously.

The images mirror the spatial incongruities of Moholy-Nagy's Photo-plastiques and are meant to suggest the arbitrary intersection of electronic sources colliding at a particular instant in time...any time. One might think of it as tuning through electronic "static" to extract bits and pieces of coherent signal that make up the picture. In using state-of-the-art FAX technology in 1969, these one-of-a-kind images represent the first ever electronically montaged pictures, foreshadowing the computer technology that would follow some 40 years later.