

Space Tools as Sculpture

I am a photographer. A storyteller who visually explores obscure locations, objects and micro cultures by confounding representation through abstraction to explore shape, form, meaning and memory.

In a mid 1950's issue of Fortune Magazine, the photojournalist Walker Evans chose to photograph the ordinariness of hardware tools. Some 60 years later, I photographed for Discover Magazine the extraordinary tools used by astronauts as unique sculptural objects.

Although their form may not typically match function, I experienced these one-of-a-kind tools as uniquely fabricated shaped pieces that could be abstracted when photographed with diffuse one source lighting on black & white film and be printed and exhibited on mural size fine art papers.

To create these images involved access, planning and organization.

As a result of on-going documentary NASA projects, I knew a few of the engineers who designed the tools and trained astronauts in their use on the International Space Station, the space shuttle and the Hubble Space Telescope. With their support and access, I could only photograph within a high security "clean room" — a dust free environment that included wearing a bunny suit consisting of a hood, mask, boots, gloves, and coveralls to prevent contamination. My equipment had to be hand cleaned with an Isopropyl Alcohol mix.

After experimenting with different camera formats, lenses and lighting to discover how best to visualize the tools floating, I decided to work with a quality of diffuse light that was repeatable when a single light source is placed under a tabletop made of opaque white acrylic. This repeatability coupled with a fixed lens medium format camera, and black and white film with extended red sensitivity (to further enhance the depth of blacks and whites), resulted in negatives that could be scanned to produce 16 bit high resolution files capable of being printed on mural size paper up to more than sixty inches tall.

Publications

- *Infinite Worlds – the People and Places of Space exploration* by Michael Soluri, Author / Photographer (Simon & Schuster)
- *NASA Space Shuttle – 40th Anniversary*, by Piers Bizony (Quarto Publishing)

Media

- WIRED, NPR, Smithsonian Magazine, Discover Magazine, New Scientist

Exhibition / Permanent Collection

- "Outside the Spacecraft: 50 Years of Extra-vehicular Activity," - National Air and Space Museum
- Eight mural size prints are in the permanent collection of the Smithsonian National Air and Space Museum, Washington, DC.