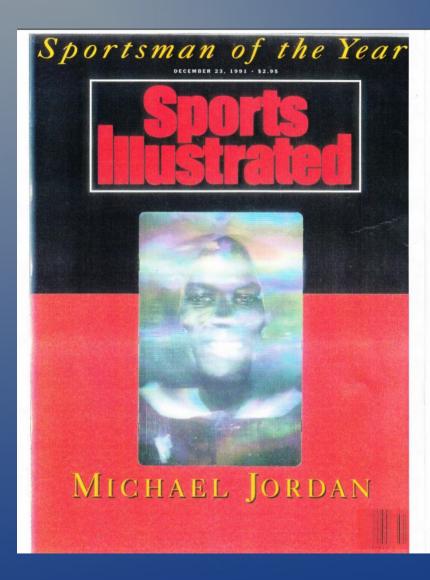


- Born in New York City, USA on April 20, 1948.
- Studied photography and cinematography at Humbolt State College from where she graduated with a B.A. in 1971.
- Studied holography at the San Francisco School of Holography under Jerry Pethick and Lloyd Cross in 1971 and re-joined the efforts of Multiplex Company and School of Holography in 1975 after further completing her early works and travels.



- Along with Lloyd Cross, she created tunable lenses for successive generations of Multiplex printers including those exported internationally. In 1975 she assumed Directorship of the San Francisco School of Holography which she maintained until its closing in the 1980's.
- Sharon's love of the motion-picture image and natural subjects would inform her own works in Multiplex holography beginning in 1974 with 'Squirrel'. Her love of photography and celebrity subjects informed her commercial works in multiplex holograms and embossed hologram subjects.



FROM THE PUBLISHER



McCormack helped add a

this week's cover is not only a first for SI but also one of the most ambitious holograms ever mass-produced: a full-color image of a live subject in motion. It is fitting that the subject of this unique work is our 1991 Sportsman of the Year, Michael Jordan, an athlecte whose reputation was made by reaching for new

The idea for a holographic cover arose in early November when our editors picked Jordan as this year's Sportsman. "We decided to do three stories about Michael," says managing editor John Papanck, "because we naturally think of him in three dimensions. And if we want to show him three-dimensionally, why not a hologram on the cover?"

The task of bringing Jordan from 2-D to 3-D—he has long forced people to raise their D a level—fell to Sharon McCormack, of White Salmon, Wash, one of the leading holographic artists in the country. McCormack, who also created the hologram featured on the cover of Prince's new compact dise, Diamonds and Pearls, was thrilled with the idea of shooting Jordan for us. "It thought it was fantastic that SI was going to do something so current with someone so famous," says McCormack. "This involved technology that's been available only for the past three years."

To create the image, McCormack seated Jordan on a turntable in a Chicago studio and a mined a specially designed 35mm movie camera at him. Jordan began the shoot by facing to his right, but as the camera began filming, he was rotated 120 degrees, at approximately 1½ rpm, so that from the camera's fixed vantage point, he ended up facing left. At a specific point in the rotation, McCormack cued Jordan to start smiling and slowly increase the width of his smile to its maximum. "Michael had a very hard job," says McCormack. "He had to smile and exude charisma in slow motion while keeping his body perfectly still. He couldn't even blink. He was very graceful and smooth."

McCormack selected a 200-frame strip of film—about 10 seconds of action—to be made into the hologram and sent it to American Bank Note Holographics in Elmsford, NY. Through a complex four-step process, ABN used laser light to optically combine the frames into a master hologram that was then made, through another four-step process, into a metal plate. Using the metal plate, they pressed 4.1 million foil "labels." which were then affixed to this week's compared.

To appreciate the full effect of the image, hold the cover of your SI about 16 inches away from your eyes and look at the center of Michael's face. A clear light source—such as a halogen track light—should be behind and above you, about left feet away and at a 45-degree angle. Bright sunlight works too. At the correct angle, Jordan's jersey will appear bright red and the background a deep blue. By tilting the cover left and right, you will see Jordan break into a dazzling smile.

"The hologram is like a sculpted image that you can interact with," says McCormack. "Because it captures a gesture, it can communicate the essence of Michael's personality. It's the closest thing to having Michael right in front of you."

Mark Mulroy

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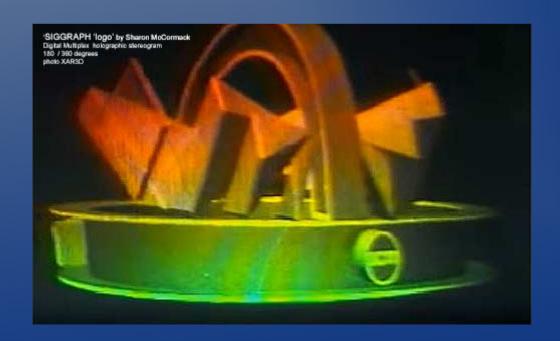
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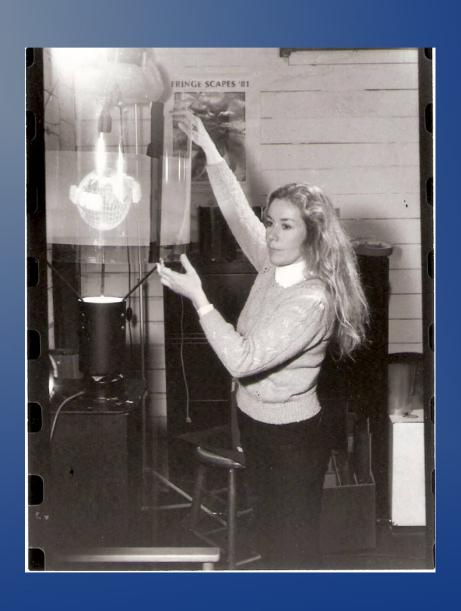
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Sharon McCormack Holography • P.O. Box 38 • White Salmon, WA 98672 Studio (509) 493-1334 • FAX (509) 493-4830

 Sharon's interests in testing the limits of holographic imaging included computer graphics in the 1980's when she created a number of Multiplex type CG logos for SIGGRAPH 87, SPIE, and llford.





 Sharon was an actor in her own Multiplex movies, and the movies of others.

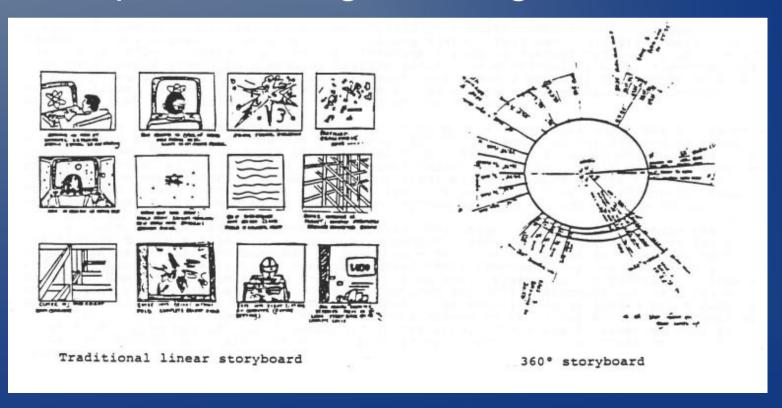


- In pursuit of higher standards of imaging and printing and wider subject matter Sharon developed computer controls for her Multiplex printers, and experimented with integrating video graphics with film recordings to generate short multi-media narrative Multiplex integrals like 'Time Man' (1982).
- She envisioned 'holographic movies' based on open reel technology for Multiplex integrals and developed reel-to-reel film drives for Multiplex printing of films of any length.

- As a photographer and a film cinematographer drawn to holography and the capacity of Multiplex holograms to capture motion and time, Sharon embarked on extending visual effects and subject matter in integral holograms.
- 'Time Man' (1982) frames showing Visual Effects (VFX) using video generated images.



 Sharon discusses standard film story-boarding and 'Time Man' 360 degree angular storyboard in her 1986 SPIE paper "Special Effects Techniques for Integral Holograms"



 Frames showing various subjects of Sharon's Multiplex holograms in 360 & 180 deg. displays.



• When embossed holograms became commercially popular in the 1980's and featured high quality images under ambient light conditions, under Kenneth Haynes and American Banknote Holographics, Sharon collaborated with Haynes and ABNH on a number of projects where she was the integral hologram cinematographer for holograms mastered from film sequence originals.



- In 1991 Sharon McCormack moved from California to White Salmon Washington to pursue her passions in holography and wind-surfing.
- In White Salmon, a small town overlooking the Columbia River Gorge, she set up a studio laboratory and created a number of notable holographic integrals (Michael Jordan, Native Indian Series) that were exhibited in galleries as well as to the general public.

larning: If you dream of some elusive future where vou'll windsurf frequently, work when it's not blowing and contemplate majestic sunsets on a daily basis, do not read this article; it'll probably make you

But if you're strong enough to keep reading, meet Sharon McCormack. Avid windsurfer. Gorge resident. One of the nation's top holographers. She doesn't need to call the windline in the morning ... she can see what is happening at the Hatchery without lifting her head off the pillow.

A love of windsurfing, talent in a unique art and desire for independence and fun have brought McCormack to the Gorge-to a light-filled home on a bluff above the Columbia River in White Salmon, Washington.

It is an artist's home, decorated in muted colors of the Southwest, while large windows frame one of the most majestic views of the Northwest. Sculptures, plants and quirky keepsakes compete for the eye with outdoor views of rock, river and sky.

McCormack says she was an "art-oholic" long before she got



made from photographic film. The shift to using movie film gave McCormack a career that seemed made just for her.

A Three-Dimensional Life



Sail when it's windy, work when it's not- another rough day for Sharon McCormack.

into holography, but no other medium gave her the satisfaction of this high-tech art form.

"When I first heard about holography. I didn't believe it." she remembers. "But then I saw some early holograms. I was hooked."

She studied holography in San Francisco, but at the time holograms were only being made of inanimate objects. They were largely curiosities.

Fortunately the art and technology of holography eventually evolved, and McCormack returned to it after a stint in cinematography and an extended visit to Europe.

"There was a new process ... making holograms from movie film [rather than photographic film]. I felt that a career had been created for me."

There was not, however, much work-yet. For several years McCormack apprenticed. taught and made holographic optical printers and lensing syscommission to make a very large, very futuristic hologram, "Time Man," for a Silicon Valley bar helped McCormack make the transition from struggling artist to professional holo-

"Time Man," a hologram shot in video, which blended 14 master tapes with digital effects, was not only a riveting piece of holographic art, it was the first hologram to tell a com-

An exhibit for the '84 Summer Olympics in Los Angeles and other projects followed, and McCormack at last was making a living doing what she liked best.

But something was missing. "I needed a sport," she says. One day while on a sailboat in San Francisco Bay, thinking she was the fastest person on the water, McCormack saw "these things" ripping by.

"I thought, 'If I'm having tems for optical printers. A how much more fun could I McKeown-Ellis

have on those?""

Before long she was addicted. "Windsurfing became my total priority. My whole perspective changed on time and work. ... I needed to be free when it was windy."

In part toward this end, she started thinking about leaving San Francisco. The last day of a summer spent in the Gorge clinched the deal.

"I was headed back to San Francisco and had loaded all my stuff in my van, with my windsurfing gear on the bottom. About Cascade Locks I realized that with the weather conditions, it must be raging out east. I turned around and drove back to the Wall. unloaded all my stuff to get to my equipment and rigged up.

"Then I drove back to California and put my house up for sale "

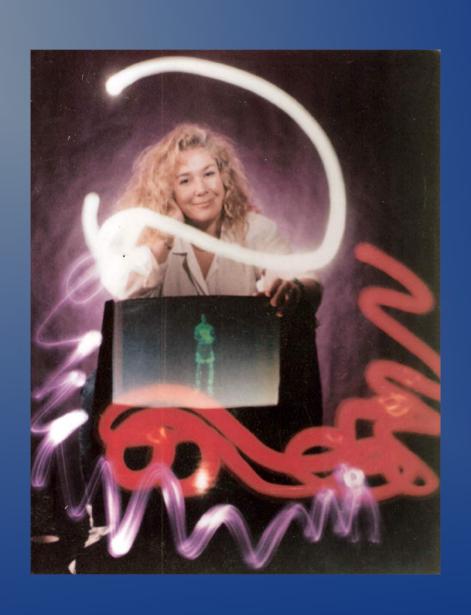
The move three years ago hasn't hurt her career. While many who move to resort areas find themselves working part-time in restaurants, hotels or retail shops, McCormack's reputation and connections keep her in the forefront of her craft.

Photographing 1992 Sportsman of the Year Michael Jordan for a holographic Sports Illustrated cover. Photographing Prince for a new CD cover. Capturing baseball greats for holographic baseball cards. Those are the kind of assignments McCormack has.

She keeps busy with an invigorating mix of projects, including curating a holography display at the Oregon Museum of Science in Portland, and an exhibit of her work at the Gorge's Maryhill Museum of Art. A collection of holograms featuring Native Americans is in the works, as is a series of small holograms for the general public

"Really time-consuming work-like computer-generated images-can only be done during the non-windy season." this much fun on this big boat, she says firmly .- Davinne

• Sharon McCormack performed many art direction and production duties in projects with commercial clients using multiplex integral holography techniques. Her career in commercial display holography featuring Multiple integrals and embossed hologram integrals spans four decades, 1970's to 2000's.



- Sharon McCormack died in White Salmon, Washington, USA at her home on October 13, 2016.
- Her holographic works, writings, photographs, lab notes and professional correspondence are archived by Al Razutis, by Agreement with Sharon and in perpetuity, at the Sharon McCormack Collection & Archives presently housed at Razutis' Visual Alchemy studio on Saturna Island, BC, Canada.

- The Sharon McCormack Collection & Archives are presently available to view on a by arrangement basis for curators, exhibitors or collectors of holographic art and historical displays.
- Access to the contents of the Sharon McCormack Collection & Archives on the web is at http://www.alchemists.com/visual_alchemy/holo_sharon.html
- To arrange a personal visit to these archives, or to discuss exhibition, historical research or educational dissemination of these works contact Al Razutis at alrazutis@ymail.com