Holographic center brings art to light

MUSEUMS

By Patrick Barry

There aren't many fingerprints on the glass exhibits at the Museum of the Fine Arts Research and Holographic Center. That's because as you close your hand over the three-dimensional Mickey Mouse image, the light dissolves and you see that your fingers are still inches from the glass case.

Holography is a magic trick done with lasers and glass that wasn't performed until 1948, by a scientist in London. But the eerie 3-D images are well known now; credit card companies use them to thwart forgeries, and National Geographic somehow managed to print 11 million holographic eagles for a cover story in March, 1984.

To see three rooms full of state-of-the-art holography, a trek to the Holographic Center at 1134 W. Washington is in order. The museum's offbeat location amidst industrial buildings on the Near West Side means you might be the only visitor, but a short visit will widen the eyes of anyone with even a sliver of the scientist in him.

Mickey Mouse is the first surprise. He jumps off the glass and smiles at you, glowing green. A peak behind the free-hanging frame shows that the "picture" is hardly an inch deep, yet the image seems to take up a foot in depth.

Next to Mickey is a nut and bolt suspended in air. And then a complex engine with gears and fuel lines that seems to be sitting in a box. But the box is only three-fourths of an inch deep.

Displays and diagrams at the museum take a stab at explaining for the layman how the images are formed. Whether they succeed is another question.

The basic idea is that a laser beam shoots a stream of light at an object—Mickey Mouse, for instance—and then transfers the image to photographic film. Like taking a picture with a camera and flash.

But by splitting the laser beam before it reaches the object—sending half of it off to bounce off some mirrors while the other half is engulfing Mickey Mouse—the 3-D image can be captured.

The bouncing laser light is directed to merge with the light that scoped out Mickey. Like waves in the bathtub intersecting and getting bigger and smaller, becoming more three-dimensional as they interact, the image of Mickey takes on shape and depth.

All that's needed to bring Mickey alive is a light bouncing off the film or shining it through from behind.

Got that? No matter. A few minutes in front of the exhibits, fingers grasping an image in the air, and the reality of the science becomes clear, even if the physics does not.

The museum is open from 12:30 to 5 p.m. Wednesday through Sunday. Admission is $2.50, or $3.50 for a guided tour. Call 226-1007 for details.