

SCHOOL OF HOLOGRAPHY

by Thomas Albright

The School of Holography was established in the fall of 1971. It was set up to make information about holography (three dimensional laser photography) available to the general public and to develop holography as a visual medium. The major activities of the school in the coming year will be the offering of basic and advanced classes in holography, workshops, and the publication of a journal of holography. Initial facilities of the school include four complete holographic studios and associated equipment, including lasers, optics, viewing areas, and darkroom facilities, as well as a permanent exhibit of current work in holography, including holograms by major artists. Also available are information booklets, notes, and bibliography on the subject of holography.

The converted warehouse at 454 Shotwell Street is the world's first and only known holography school. Its founder, and head is a young physicist-turned-holographer named Lloyd Cross. Its senior faculty member is a young artist-turned-holographer, Jerry Pethick. The school functions on three simultaneous, but distinct, levels. Its main business is teaching the fundamentals of holography to beginning students, 130 of whom have already completed the \$85 eight-week course in basic holography to become competent holographers. The course carries credit at a number of local colleges.

"The history of holography is only ten years old, and the laser has only been around for twelve. We're about where photography was in the 1860's," Cross pointed out. "But today it takes only months or years for what used to require decades. Developments are going to be very fast."

At its simplest, the making of a small 4 by 5 inch hologram requires a two milliwatt continuous wave laser (cost: about \$150), a few lenses, a film or photographic plate, and a solid foundation under everything that will prevent any kind of movement of the apparatus while the hologram is being made; the accidental motion that will cause a blur in conventional photography will make a hologram virtually unreadable. Cross and Pethick have solved this problem by the simple expedient of setting up platforms that are covered with several hundred pounds of sand and concrete, and rest on a pedestal of inner tubes; the sand can also be used to stand objects in so they stay solid. The school is equipped with four such set-ups, each in its own darkroom, as holograms of this simple, "transmission" type must also be made in total darkness. "The whole room is a camera," Cross explained.

