



## O.U.'s NUCLEAR REACTOR

*and the men who know her best*



Dr. Howard

SHE couldn't have picked a better year to come. The recent arrival of O.U.'s "swimming pool" type reactor during this 50th anniversary year of O.U.'s most renowned college, the College of Engineering, bodes a mushrooming renown for both of them. Although the reactor is limited to the production of 15 watts by the Atomic Energy Commission, its ability to produce highly-qualified atomic engineers is unlimited. Particularly in that the reactor is a "swimming pool" type. The hot part of the reactor, 800 grams of uranium-235 on loan on O.U. from the A.E.C., is encased in graphite blocks which in turn are submerged in 1,000 gallons of distilled water. The water, like the graphite and the 121,500 pounds of concrete blocks which surround the pool's eight-foot-deep aluminum tank, acts as a radiation shield. But it also acts as a unique looking glass for students curious about the highly-cautious operations of the reactor's control and safety rods. Dr. Robert A. Howard, Professor of Physics and now Chief Supervisor for the Reactor Center, is presently getting the nuclear bugs worked out of the reactor and is preparing Center courses on the operation of the reactor and the study of irradiated materials. Parents, leary about their sons' driving the family car, much less operating a nuclear reactor, have nothing new to dread. An amazing number of safety apparatus stand ready to "scram" (to shut off) the reactor in case Junior doesn't press the right buttons.

(Continued next page)



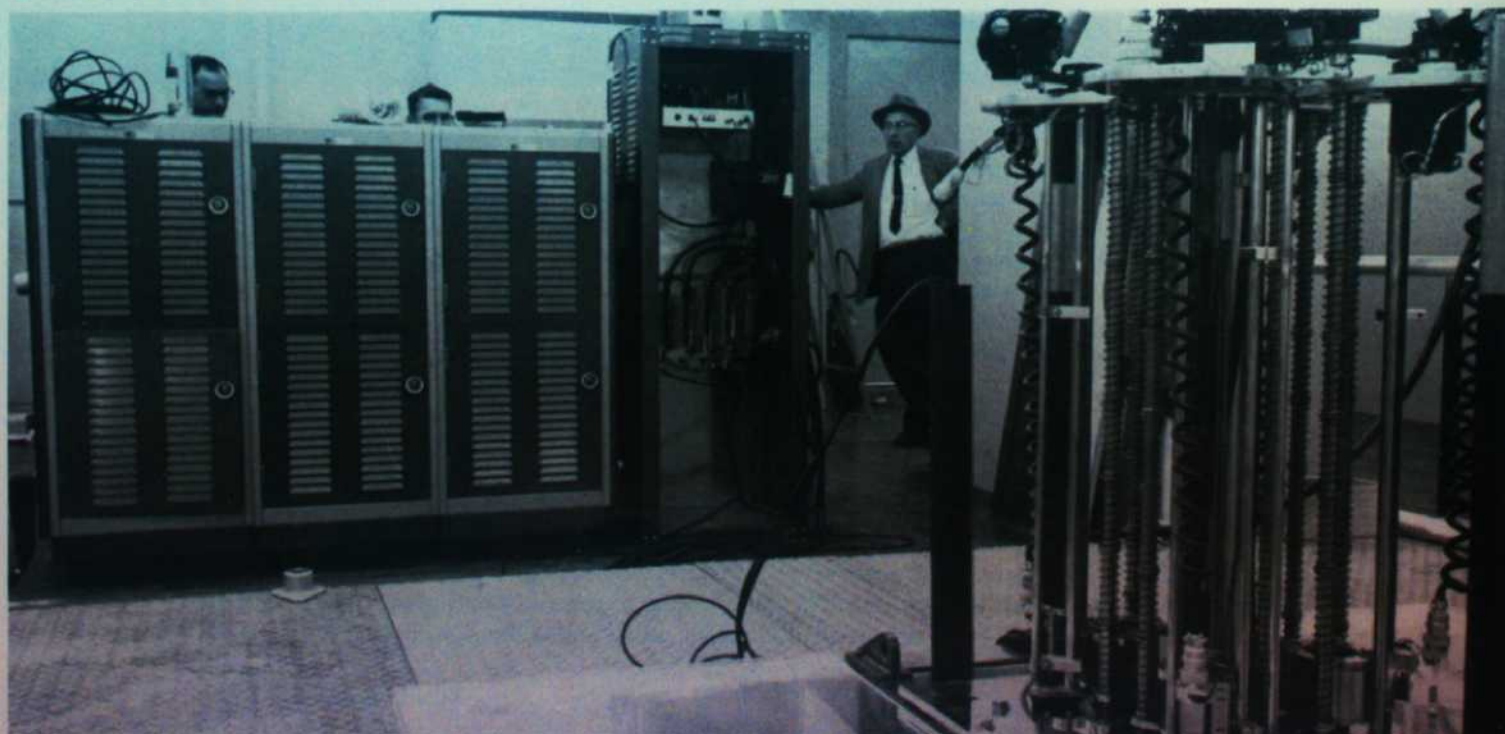
The uranium's graphite home can be seen by the feet of Aerojet field man Al Davis, shown standing in an area now filled with water.

Concrete blocks weighing 1,500 lbs. each are fitted around the reactor's aluminum 'swimming pool.' The tubes are reactor entrances.



**T**HE week or so it took to install the reactor was the culmination of a year of planning for a heterogeneous group of scientists, architects, and janitors. First the Old Journalism building was remodeled to include the "swimming pool" pit, air-conditioning for the temperature-f finicky reactor, and laboratories for a not-hot reactor control panel which will be used solely for teaching purposes. Then parts and physicists from Aerojet-General Nucle-

Workers peep over the reactor's control unit at the magnetically-operated controls. The room is the Old Journalism building's former press shop.





Substances are pushed through these three-inch and one-inch-in-diameter "glory holes" for irradiation in the water-surrounded graphite blocks.



The reactor installed, a workman hangs a light unit on the wall. The unit is a safety measure for lighting room if electricity fails.

onics, the company which sold the \$96,950 reactor to O.U., began arriving. Janitors began swinging the some heavy, the some delicate parts into place, and the physicists kid-gloved their installation. Erudite sidewalk superintendents, wearing dosimeters to check for radiation, beamed happily over the clockwork cooperation. Most happy were fellow physicists Dr. Howard and Vice-President in Charge of Research and Development, Lloyd Swearingen.

Satisfied University Vice-Prexy Lloyd E. Swearingen congratulates Aerojet physicist Jeff Eerkens on a most satisfactory installation.

