A GEODESIC U. S. PAVILION AT THE T ENNALE?

Congress has not appropriated funds for a United States pavilion at La Decima Triennale — the Tenth Triennale — of Milan. But officials of the Triennale have become very much interested in R. Buckminster Fuller's geodesic structures and his models for the U. S. Marine Corps, and have allotted sites for two such domes — one for Italy's own flower show, the other to be used by the U. S. State Department rent free.

photographs by r. buckminster

On these 2 pages, a 36′ dome weighing 550 pounds with 1,000 sq. ft. of floor space. Made in January 1953 by University of Minnesota students of light oak rails trussed with fiber glass neoprene cord, fastened with stainless steel fittings. Designed for Minnesota snow loads, carries concentrated weight of 5 climbing men, weighs ½ pound of enclosing structure per sq. ft. of usable floor space. In June, 3 students trailered it, packaged, to Aspen, Colorado, erected it in 1½ hours before assembled International Design Conference, then trailered it to Woods Hole, Mass., to house students working on another dome. Temporary sheath is polyethylene. These domes precede U. S. Marine Corps models made with paper skeletons.

XT

Fabric print design competition

The Decima Triennale, in collaboration with the Socota Company of Milan, announces an international printed fabric design competition. Its purpose is the development of superior designs for fabrics to be used in furnishing interiors. There is no restriction as to style, or limit as to the number of colors which may be used. Neither

(*Continued on page 131*)

At the very moment when the Triennale offers the United States a world audience, R. Buckminster Fuller's lifelong efforts to solve the problem of shelter are approaching a climax of tremendous economic and social implications. With variations of materials and structure each new dome (see next page) brings him closer to "maximum shelter performance per pound of building material." He *has* solved the basic problem in mathematical-structural terms and has gone on to another: cutting the time and cost of actual building. For portable, inexpensive shelter, we need now: *mass reproduction*, duplicating these mathematically exact assemblies at high speed. Fuller has just returned from the Institute of Paper Chemistry and the Forest Products Laboratory in Wisconsin with news that he has found the means. Next month we will explain how the paper industry can provide a rigid, waterproof, hazard-resistant *structural* material for the *skeleton* of geodesic domes, and how the printing industry can speedily roll out the flat-packed structural components, marked with directions for swift, dry, on-site erection by unskilled labor. The Triennale proffers a free site; Fuller has contributed plans; qualified volunteers are ready to take responsibility for construction. The only remaining needs are about $15,000 in cash, and the paper and plastics only American industry can produce. The importance of the opportunity is discussed on page 53.

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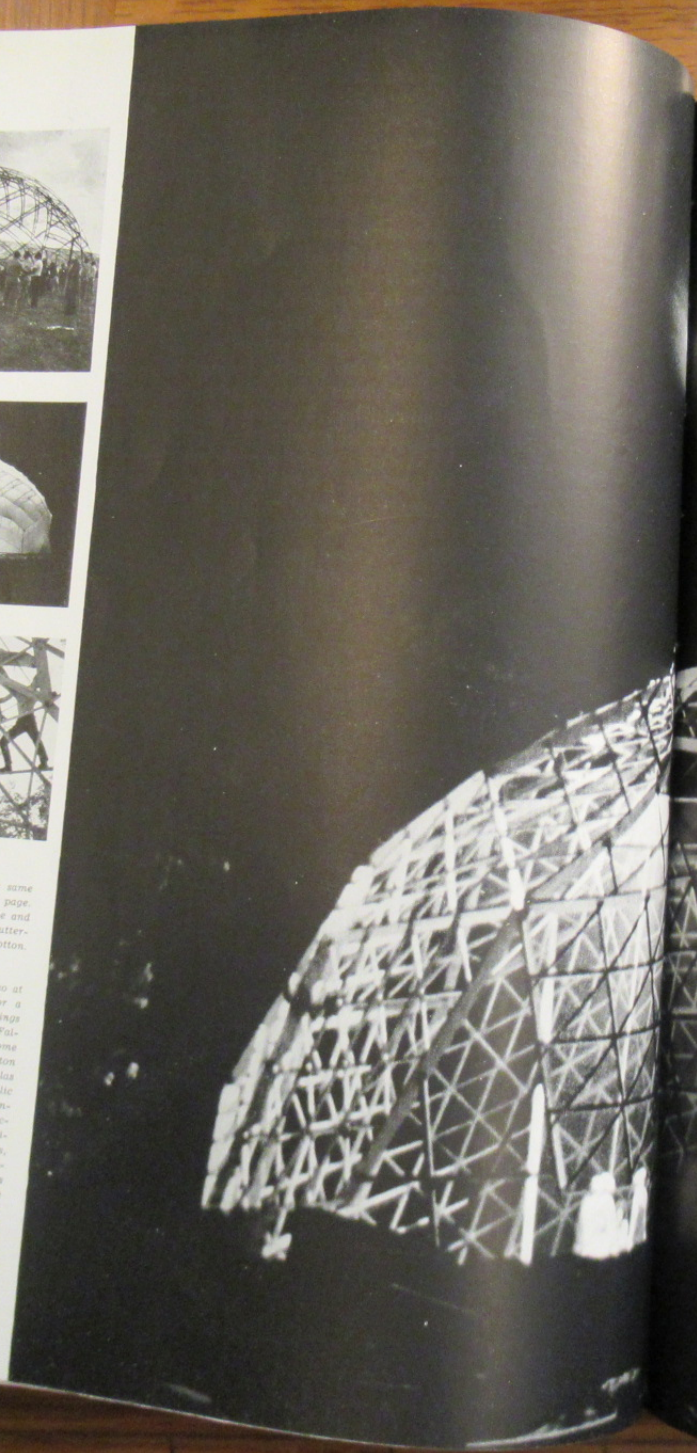
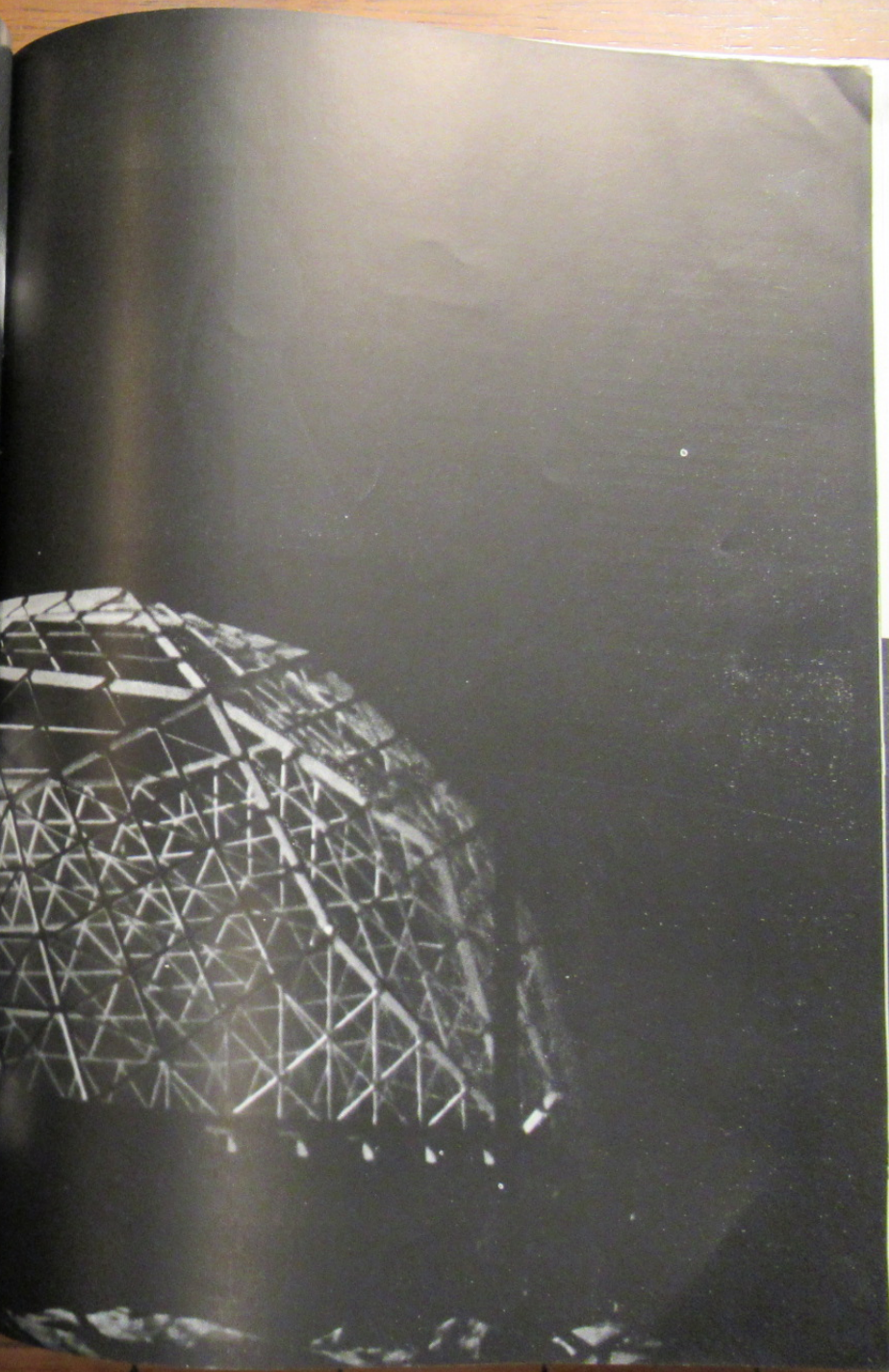
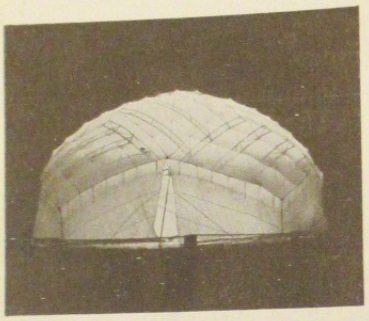
2 small photos at top show the same 36' oak dome as on preceding page. After it was taken to Woods Hole and re-erected, it was covered with flutter-proof, hyperbolically-stressed cotton.

Dome in third small photo and also at right will serve as restaurant for a group of Woods Hole motel buildings by architect Gunnar Peterson of Falmouth, Mass. 54' in diameter, this dome weighs 2½ tons, was sent in a 3½-ton truck, is of 1" x 3" and 1" x 8" douglas fir struts assembled into 90 hyperbolic diamonds. Peter Floyd, William Wainwright, and 8 other graduate architectural M.I.T. students, aided by 20 architectural students from other colleges, took 7 weeks to make it—from the production of the engineered components to erection. The restaurant will be covered with Mylar, duPont's new polyester plastic film. Fuller evolved its structural principles for later fabrication of stainless steel diamonds for storm-, bomb-, shock-, proof enclosures.







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