

SANDIA LAB NEWS

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Lab Fair Exhibit Takes on Bright Look This Year in Geodesic Dome

Visitors to the New Mexico State Fair, Sept. 27-Oct. 5 will find a pale green sphere, which glows at night, housing Sandia Corporation's displays of mechanical and scientific interest.

The geodesic dome, similar to those used to house radar antennae on the DEW line, is on loan from the Lincoln Labs in Massachusetts. The three-quarter sphere is 40 feet high, 55 feet wide, and is constructed of triangles of translucent Fiberglas.

The display building will be located this year on the main exhibit street opposite the Youth Building. A nine foot black metal sign with "Sandia Corporation" in foot high gold letters will identify the structure.

Inside there will be 14 displays around the sides and one in the center.

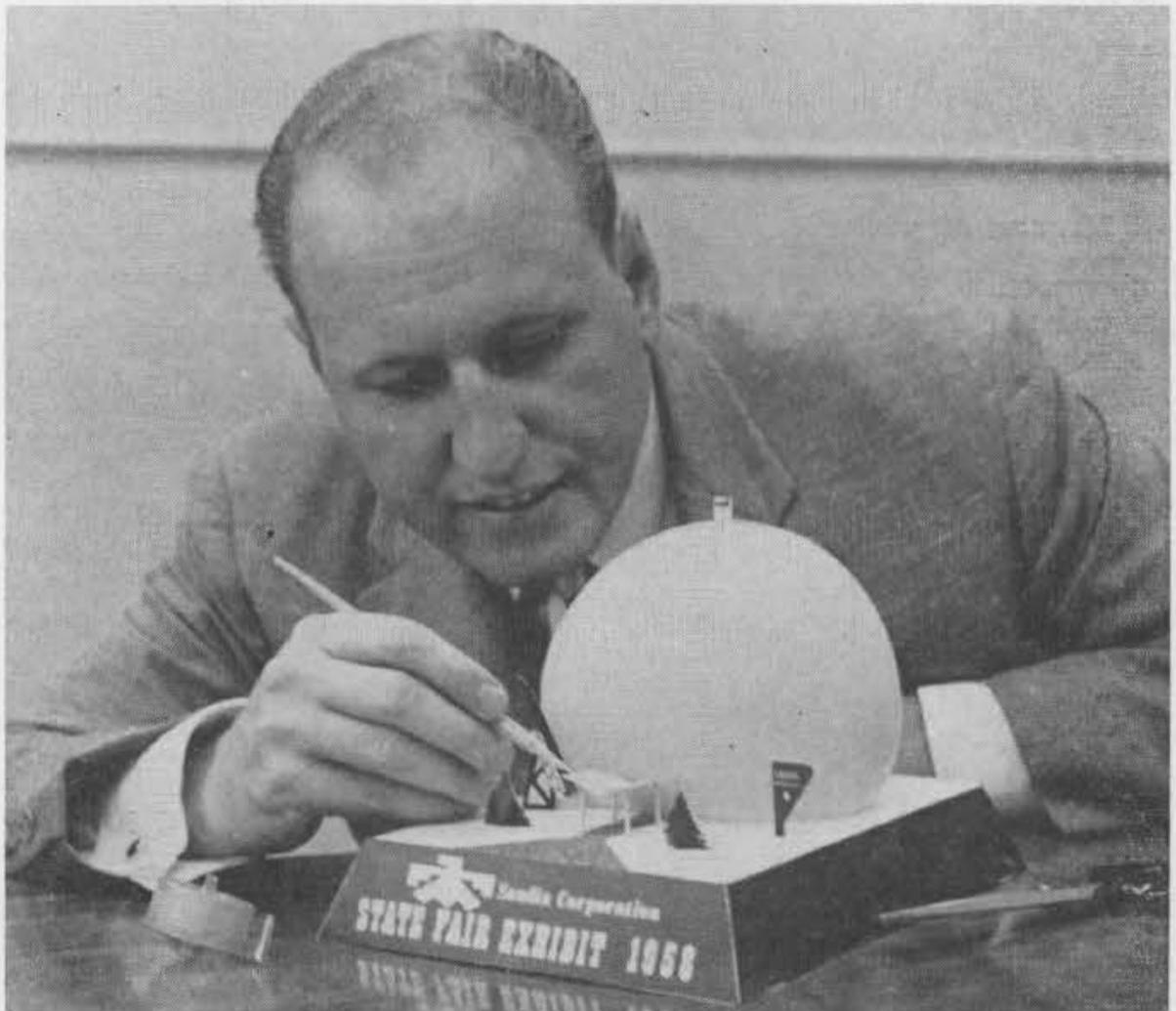
Van de Graaff Model

Counterclockwise from the entrance will be a small working model of the Van de Graaff accelerator; a continuous radiation counter and comparison with radiation values at Sandia Crest from a radium dial watch and from medical X-rays; another display will feature hi-fi music transmitted on a beam of light.

The telemetering displays will be audience-participation type with workable controls causing changes within the exhibit.

An outstanding feature will be one of the first public showings in this country of a movie by the University of California Radiation Laboratory, filmed for the Geneva Conference on Atomic Energy. The movie, "The Industrial Application of Nuclear Explosions," will deal with underground atomic explosions for the generation of power and other uses.

Halfway around the display row will be a Plasmatron, which generates gas jets with temperatures to 30,000 degrees F.—twice as hot as the surface of the sun.



MODEL OF SANDIA'S State Fair exhibit was assembled by John Leslie (4111), coordinator of the project. Materials for making the model will be given free to children visiting the displays.

Examples of use of this extreme heat will be shown.

Piezoelectric Exhibit

Two exhibits show piezoelectric devices which generate currents through sudden application of pressure or impact.

Electronic circuitry will be depicted by a number of miniaturized components made possible through use of transistors instead of vacuum tubes.

A revolving boom overhead will carry a satellite at one end, similar to that displayed at Sandia Corporation during the recent Savings Bond Drive, and a nose cone at the opposite end containing a TV camera with transmitter. The camera will photograph exhibit visitors with the image received on a TV set in the building.

A small instrument atop the dome will measure wind velocity and direction and will tie in di-

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Fair Exhibit Has Bright Look

rectly with the meteorology display inside.

Still another exhibit will show in color the steps involved in erection of geodesic structures.

QA Display

Center cabinets will contain the Quality Assurance display of environmental conditions previously shown during Armed Forces Day and during the recent AEC-ALO open house.

Two "handouts" will be available for the fair visitors. A brochure "State Fair Science Notes" will describe the Sandia displays to students and adults. The handbook will be available to the left of the entrance where there will also be a world map showing the extent of the distribution and exchange of information between Sandia Cor-

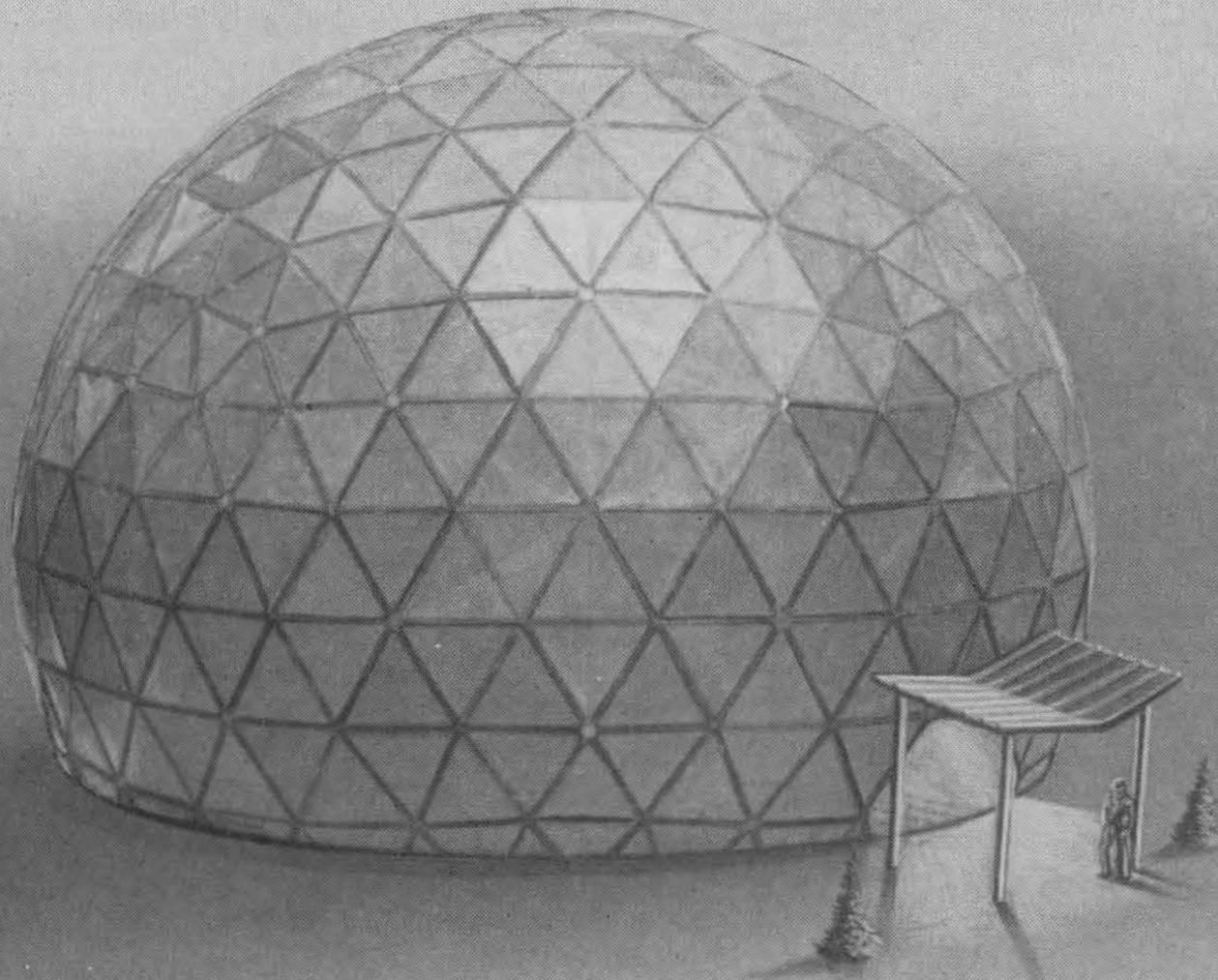
poration and other agencies, firms, scientific and educational institutions.

For the children there will be a model of the geodesic structure which can be assembled by using scissors and tape. These models have already been placed in business houses, banks and public buildings to advertise Sandia's exhibit.

Chairman of the State Fair committee is T. B. Sherwin (3125).

Coordinator for the fair exhibit is John Leslie (4111), with assistance on technical problems given by W. A. Gardner (1610), George Power (2441), Wally Ives (2463), R. E. George (2413), Hardin Simmons (2413), Omar Heins (2443), W. F. Carstens (7223), A. B. Metzger (3210) and Brian Finley (3125).

Arrangements for individual exhibits have been handled by: R. R. Berner (5150), Harold Rarrick (3161), R. W. Healy (1626), L. L. Lathrop (5215), R. H. Gablehouse (5223), E. W. Kersten (7113), K. L. Shipley (5141), George Ingram (5132), Arthur Hill (1464), N. J. Eich (1462), H. J. Plagge (5232), M. J. Davis (5513) and H. J. Bowen (5212).



GEODESIC DOME 40 feet high will house Sandia Corporation's 1958 State Fair exhibit. The sphere shaped structure will be constructed of triangular panels and will be located on the main exhibit street at the fairgrounds. Many visitors are expected.