Musser Copernican Planetraium given by Hughes Aircraft

December 29, 1966

The Musser Copernicum Planetarium, a radically new and different astronomical calculator and space planetarium, will be presented to the Physics Department of the University of California, San Diego, Wednesday, January 4 by Hughes Aircraft Company. The presentation will take place at 11:00 a.m. in room 1344,Undergraduate Sciences Building.

Dr. E. Margaret Burbidge, Professor of Astronomy at UCSD, will accept the planetarium, and Mr. J. E. Jardine of Scientific Space Industries Division will represent Hughes Aircraft Company.

The instrument, which has a total weight of about 700 pounds and is valued at about $6,000, is self-contained in a relatively light-weight, portable cabinet, and to the viewer resembles a giant television screen. Inside the cabinet, however, is a complexity of computers and projectors, which allow planets to be shown individually or in combination under desired orbital control and attenuation.

The planetarium, which was invented and developed by Dr. Clair O. Musser of Scientific Space Industries, a subsidiary of Hughes Aircraft Company, is ideal for classroom use. A lecturer can control the black light, read from the calendar clock, set the time register, attenuate the sun, planets and asteroids, control the planets individually, control orbital speeds, reverse orbital movements and produce eclipsing binary effects.

A special feature developed by Dr. Musser is a visual space probe simulator that accurately traces the relative orbital velocities of the Earth and Mars. Last year it was able to trace the day by day movement and position of the U. S. Mariner photo probe on its journey to the Red Planet. This feature was especially developed for the Griffith Park Observatory, where there is a similar planetarium.

The Planetary System is portrayed, in color, on this new planetarium includes each of the nine major planets, the moon, the region of the asteroids, and the sun. A separate light source produces each of the objects shown, generally by rear projection from inside the cabinet onto the surface of the translucent viewing screen. Each object is controlled by a separate electrical circuit with provision for dimming, so that a lecturer can show only those objects which may be required for his demonstration.

(12/29/66)