Abstracts

A Vacuum Forming Technique for the Fabrication of Spherical or Prolate Spheroidal Reflectors (Correspondence)

J.E. Degenford and M.D. Sirkis. "A Vacuum Forming Technique for the Fabrication of Spherical or Prolate Spheroidal Reflectors (Correspondence)." 1963 Transactions on Microwave Theory and Techniques 11.6 (Nov. 1963 [T-MTT]): 553-553.

A quick and inexpensive way of making spherical or prolate spheroidal reflectors for use in the millimeter wave range has been developed. This technique is based upon the fact that for small deflections a circular membrane stretched uniformly by a vacuum assumes approximately the shape of a spherical cap, and an elliptical membrane assumes approximately the shape of a prolate spheroidal cap. In making the reflectors, 0.001 inch aluminum foil is used as the membrane because of its low elastic limit, Once the foil is stretched, it retains its shape, eliminating the ueed for continual pumping.

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