National Aerospace Laboratories

Title: *Geometric Formation of Quadric Surfaces for Conformal Arrays*

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Abstract : *In this document, the generation of quadric surfaces is discussed in terms of developable geometric objects. Two fundamental methods are discussed for the generation of a quadric; transformations of coordinate axes and projection of a geometric object. Both methods are equally competent for explaining a generic surface. A concise description of both methods along with examples is elucidated. Both numerical and graphical representation of surface generation of a quadric surface is given. Visualizations for the generated cylindrical and quadric surfaces are presented.*