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Title: Geometric Formation of Quadric Surfaces for Conformal Arrays

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Division: ALD

NAL Project No: FAC-00-01-06

Document No: PD AL 1202

Date of issue: January 2012

Contents:

Pages: 32

Figures: 10

Tables: X

References: 8

External Participation: Nil

Sponsor: X

Approval: Chairman, Systems Engineering Cluster

Remarks: X

Keywords: Conformal arrays, Quadric, Surface generation, Affine geometry, Projective geometry, Coordinate transformation

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.