2.18 31638 SOUND SYSTEM DESIGN

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Reference books:

- 1. D. L. Klepper, Ed., "Sound Reinforcement, an Anthology," New York: Audio Engineering Society. The PA Bible, A series available from Bosch/Electro-Voice.
- 2. J. R. Prohs and D. E. Harris, "An Accurate and Easily Implemented Method of Modelling Loudspeaker Array Coverage," Audio Engineering Society preprint 1941(A-8), October 1982.
- H. G. Smith, "Acoustic Design Considerations for Speech Intelligibility, J. Audio Eng. Soc., Vol. 29, No. 6, June 1981. *Phartered Engineer 2ndia*

