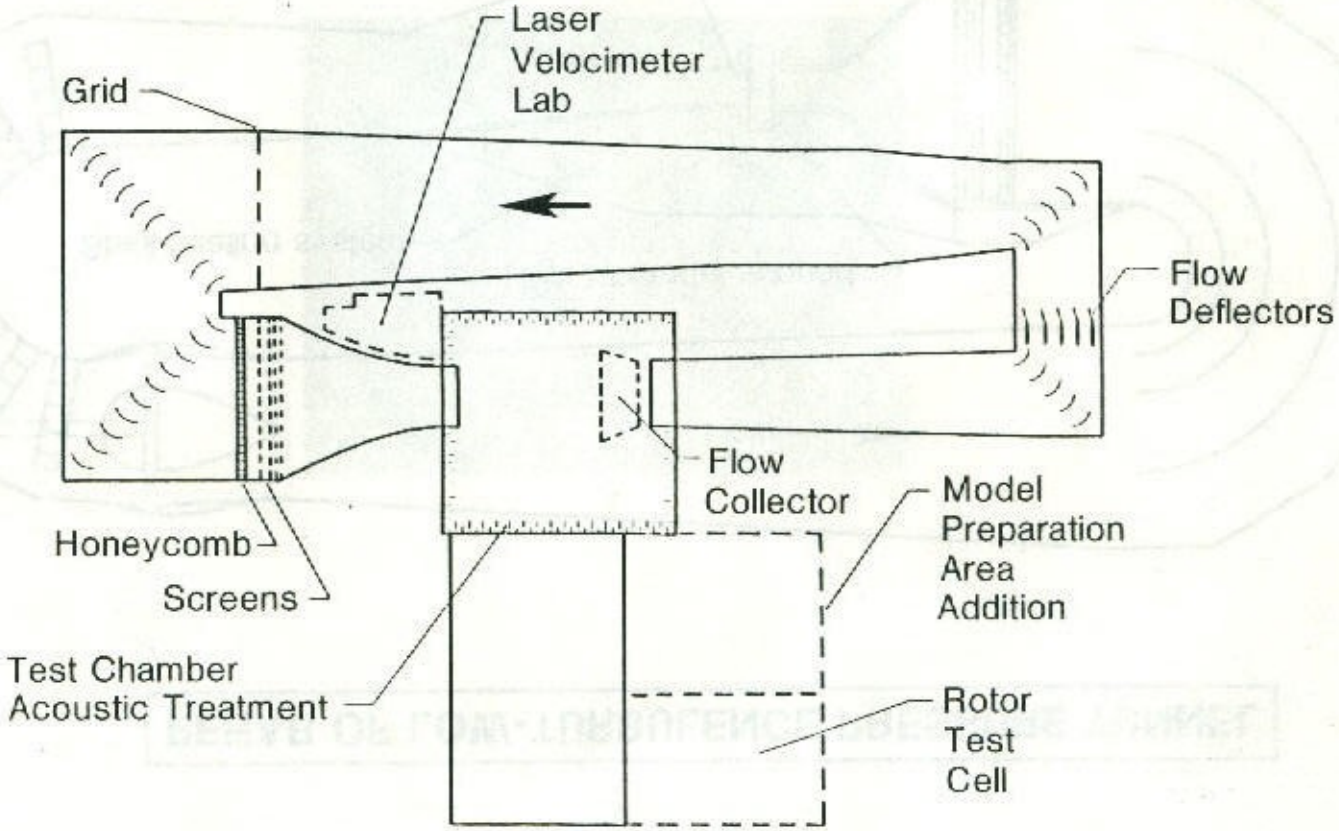4-BY 7-METER TUNNEL MODIFICATIONS