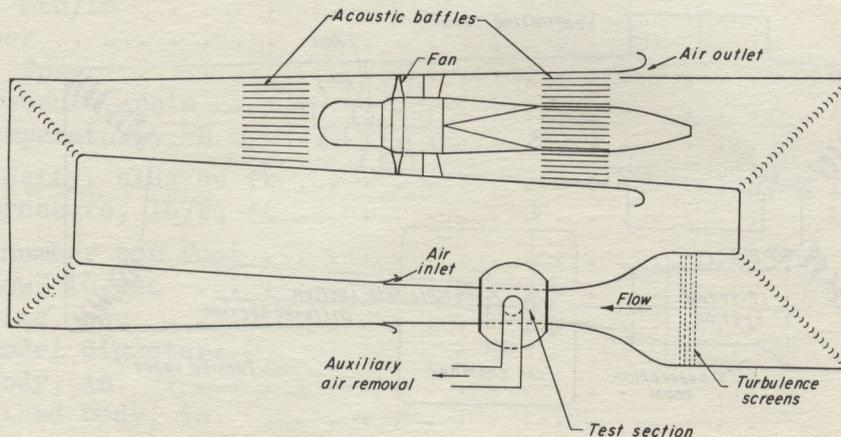


LANGLEY HIGH-SPEED 7- BY 10-FOOT TUNNEL



The Langley high-speed 7- by 10-foot tunnel is located in Building 1212B and is under the direction of the Full-Scale Research Division. This continuous-flow, subsonic, atmospheric wind tunnel can supply speeds in excess of Mach number 0.90. Transonic operation is available by connection to the 35,000 horsepower compressor of the Langley 16-foot transonic tunnel. Model mounting consists of sting support system, forced rolling apparatus, and side-wall turntable. The test section is 79 inches high and 115 inches wide with 60 inches as the usable length for subsonic operation and 120 inches as the usable length for transonic operation. In the closed test section at Mach number 0.95, the Reynolds number per foot is 4.0×10^6 . In the transonic test section at Mach number 1.20, the Reynolds number per foot is 4.2×10^6 .