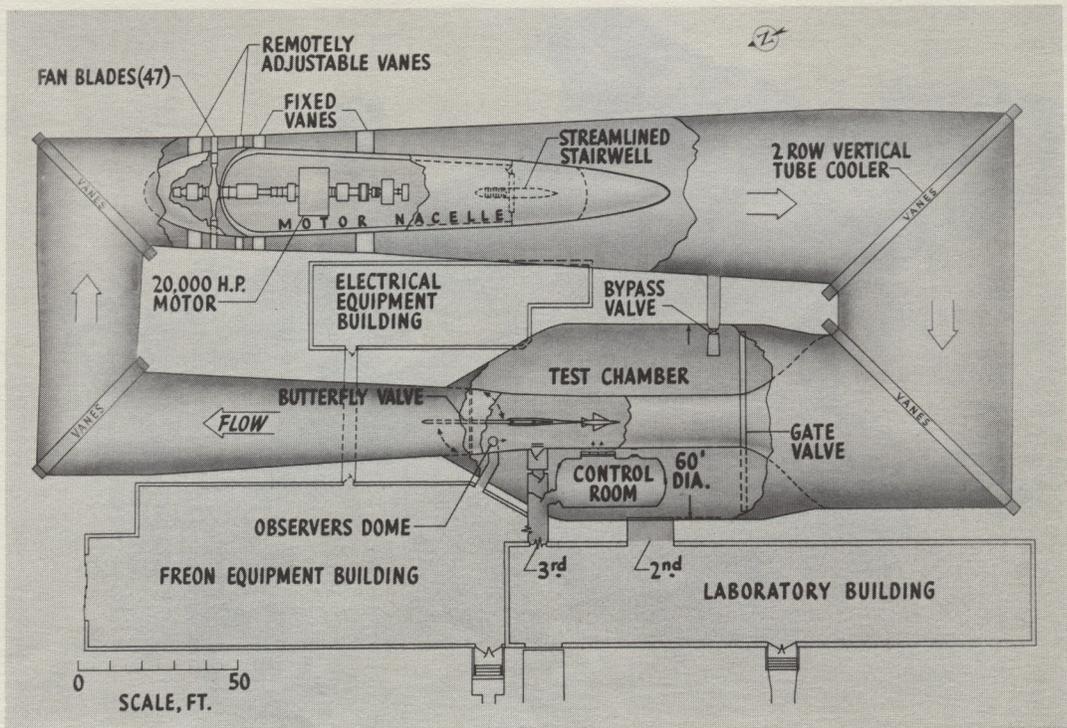


# LANGLEY TRANSONIC DYNAMICS TUNNEL



L-907

The Langley transonic dynamics tunnel is located in Building 648 and is under the direction of the Dynamic Loads Division. The test medium is air or Freon-12. The tunnel is used for investigation of flutter, buffeting, vortex shedding, gust loads, and other dynamic characteristics. Model mounting consists of sting, floor, wall, and cable supports. This is a closed-circuit, single-return tunnel with a test section 16 feet square. There is a 30-foot uniform flow region at subsonic speeds and a 20- to 12-foot uniform flow region through the transonic range. Examples of operating conditions are as follows:

Mach number . . . . .	0 to 1.22
Stagnation pressure, psia . . . . .	0.1 to 14.7
Stagnation temperature, °R . . . . .	Ambient to 600
Reynolds number per foot (maximum):	
Freon-12 . . . . .	$8.5 \times 10^6$
Air . . . . .	$3.5 \times 10^6$
Dynamic pressure (maximum), lb/sq ft:	
Freon-12 . . . . .	420
Air . . . . .	360