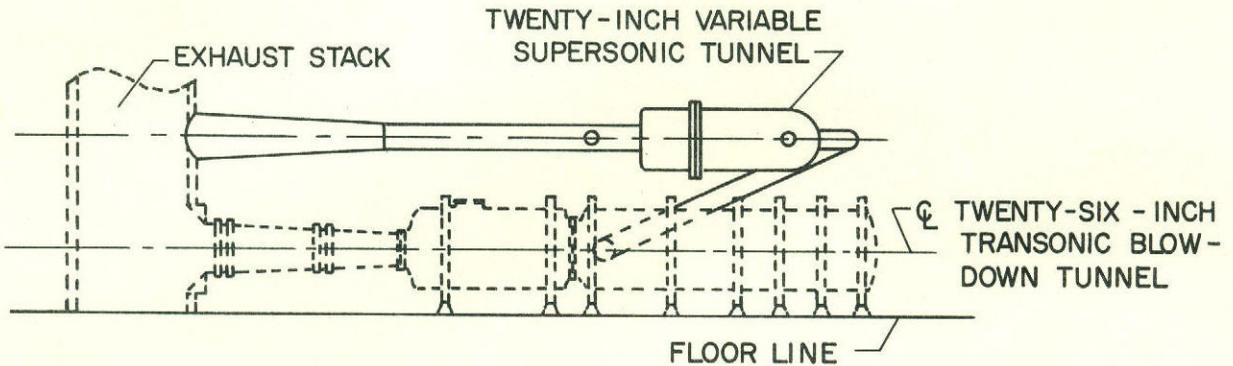


TWENTY-INCH VARIABLE SUPERSONIC TUNNEL



Tunnel

Intermittent blowdown tunnel to atmosphere with continuously variable Mach number through a two dimensional contoured nozzle; used for force and pressure tests on configurations, air inlets, jet exits, boundary layers, and for flutter tests. Test Section size 20 inch x 20 inch.

Model and Model Supports

Sting and straight through strut; $\alpha = -17^\circ$ to $+17^\circ$, $\beta = -5^\circ$ to $+5^\circ$
Offset stings for limited extended maximum values.
Side wall support methods

Data

Mach Number	P_t (psia)		T_t ($^\circ R$)	$R/ft. \times 10^6$	
	(max.)	(min.)		(max.)	(min.)
2.0	70	25	520	20.5	8.5
3.0	110	50	520	18.7	8.5
4.0	125	90	520 - 600	12.7	9.2
4.5	130	130	570 - 660	10.7	10.7

Operational - October, 1961

<u>Cost</u> -	<u>Fiscal Year</u>	<u>C of F</u>	<u>Project No.</u>
	1958	\$354,370	1701