

June 30, 1942

8-FOOT HIGH-SPEED WIND TUNNEL

Use: For testing models of aircraft and aircraft parts in a high-speed air stream approaching the speed of sound.

Authority: Approved at Executive Committee meeting of NACA June 14, 1934.
Allotment of \$478,300 under the National Industrial Recovery Act (Public No. 67, 73rd Congress, approved June 16, 1933) approved by the Federal Administrator of Public Works July 17, 1934.

Location: Plot 22, Langley Field, Va.; approved by Assistant Secretary of War September 20, 1934.

History: Preliminary work on 8-foot high-speed tunnel started October 11, 1933.
Tunnel placed in operation March 28, 1936.

Construction:

	<u>Tunnel</u>	<u>Office Building</u>	<u>Motor Building</u>	<u>Total</u>
Dimensions of building	165' x 59' x 29'	51' x 23.5' x 29'	50.5' x 35' x 28'	
Ground area occupied	9,700 sq ft	1,200 sq ft	1,800 sq ft	12,700 sq ft
Ground floor area		1,050 sq ft	1,600 sq ft	2,650 sq ft
Cubic contents	270,000 cu ft	35,000 cu ft	50,000 cu ft	355,000 cu ft
Character	Reinforced concrete construction	Hollow tile	Hollow tile	
Type and thickness of walls	Reinforced concrete - 12 in. thick	Hollow tile stuccoed	Hollow tile stuccoed	
Type and thickness of floors	Reinforced concrete - 7 in. thick	Reinforced concrete - 7 in. thick	Reinforced concrete - 8 in. thick	
Type of roof	Reinforced concrete - 12 in. thick	Built up on "Gypsteel" (gypsum plank) deck	Built up on "Gypsteel" (gypsum plank) deck	