

Chronology of Langley 7x10 High Speed Tunnel:

- 1938 The Special Committee on Future Research Facilities recommends construction of a wind tunnel at Langley with a 7 x 10-Foot diameter test section.
- 1943 The National Advisory Committee for Aeronautics (NACA) authorizes construction of the 7 x 10-Foot tunnel and construction is undertaken.
- 1945 The 7 x 10-Foot High-Speed Tunnel (HST) is completed and becomes operational in November.
- 1946 A “transonic bump” is installed, allowing early transonic testing.
- 1953 The tunnel is retrofitted with slotted walls, increasing its speed to Mach 1.
- mid1950s Sparrow missile model tested
- 1958-1959 Testing on models of hypersonic research plane X-15, which would contribute to the development of the Space Shuttle.
NATO cooperative study of variable-sweep wing concept, leading to development of outboard wing-pivot concept by Alford and Polhamus.
- 1958-1963 Mercury Project aims to put humans in orbit. Mercury Capsule model tested at Langley 7x10 HST in 1959.
- 1967 Needs of aircraft missions in Vietnam lead to establishment of Attack Experimental (A-X) program. Studies by Polhamus, Henderson and McKinney on transonic aircraft maneuverability, involving vortex-lift, and fixed and variable camber concepts.
- 1969 E. J. Ray leads study at tunnel of F-4 maneuver and buffet characteristics.
- 1971 Tests by Vernon Lockwood on powered model A-10 to determine aerodynamic characteristics in high-power conditions.
- mid1980s Waggoner, Allison and Sewall conduct studies to improve EA-6B military aircraft
- 1985 Fan blade failure
- 1990 A state-of-the-art fiber-optic-based laser vapor screen (LVS) flow visualization system is installed.
- 1994 Research at the tunnel is discontinued. Tours at the facility are conducted for visitors through 2001.