

June 30, 1940

ICE TUNNEL

583

Use of structure - for the study of ice formation on airplane models and parts.

Location - Plot 19 at Langley Field, Va. *Approved by Secretary of War November 5, 1937*

Preliminary work started December 10, 1937.

Tunnel placed in operation June 15, 1938.

Major contracts -

- ✓ Erecting the brick work complete for Ice Tunnel: Contract NAW-515, Harwood Construction Co - completed February 11, 1938 - \$6,697.00
- ✓ Application of the corrugated asbestos cement roofing and siding for Ice Tunnel: Contract NAW-513, A. C. Norsworthy - completed February 3, 1938 \$1,848.00
- ✓ Furnishing and installing all flashing, gutters, and downspouts for Ice Tunnel: Contract NAW-514, N. W. Martin & Bro. - Completed February 3, 1938 - \$ 798.00
- X Insulation of Ice Tunnel: Contract NAW-525, W. P. Thurston Co. - completed June 13, 1938 - \$4,225.00

*cost schedule*

Cost of tunnel and housing, excluding built-in equipment	\$59,533.31
Cost per cubic foot	\$0.215
Cost of built-in and inventoried equipment	27,658.68

Detail costs:

*2 space*

*2 space*

*3 space*

*3 space*

Structure and tunnel		
Contracts	\$13,568.00	
Charges to construction job orders excluding contracts	<u>45,965.31</u>	59,533.31
Built-in equipment		
Charges to equipment job orders		20,150.51
Inventoried office equipment	111.50	
Inventoried scientific equipment	248.37	
Inventoried mechanical equipment	6,921.07	
Inventoried fire-fighting equipment	<u>227.23</u>	<u>7,508.17</u>

Total to June 30, 1940 -	<u>\$87,191.99</u>
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*Turn out 19*

Dimensions of Building: Tunnel  
 Length 101'  $5\frac{3}{8}$ "; maximum width 49' 11";  
 maximum height 23' 6".

Ground area: Approximately 5,050 sq.ft.

Cubic contents:

Character: Wood tubular structure covered with an  
 insulating compound.

Type and thickness  
 of walls: Wood

Type and thickness  
 of floor:

Type of roof:

Tunnel Building  
 Length 125' 1"; width 69' 1/2";  
 maximum height to roof ridge 40'  $10\frac{1}{2}$ "

8,636 sq.ft.

276,752 cu.ft.

Brick

Brick - 8", 12-3/4", and 16" thick

Dirt floor

Corrugated asbestos roof, 1 1/32" thick