

June 30, 1942

SEAPLANE IMPACT BASIN

Use: Measurement of impact loads on seaplane hulls - Office to house personnel - Shop for work and adjustment of equipment.

Authority: Second Deficiency Appropriation Act fiscal year 1939. Approved May 2, 1939. Public No. 61, 76th Congress.

Location: At north end of Stratton Road in new area inside west gate, Langley Field, Va.; approved by Secretary of War (letter dated October 10, 1940 from Washington office to army air corps requesting permit.)

History: Preliminary work on impact basin started January 1, 1941.
Placed in operation November 10, 1942.

Construction:

	<u>Seaplane impact basin</u>	<u>Shop and office</u>	<u>Total</u>
Dimensions of building	360' x 26'-8" x 21' high over a 12' basin	61'-7" x 52'-4" x 35' high	
Ground area	9,600 sq ft	3,075 sq ft	12,675 sq ft
Second floor area		1,590 sq ft	
Cubic contents (usable)	201,600 cu ft	74,600 cu ft	276,200 cu ft
Character	Structural steel roof trusses, structure and columns mounted on a concrete basin with cor- rugated asbestos cement cover and siding	Steel frame, brick walls, reinforced concrete flo and foundation, gravel composition roofing	
Type and thickness of walls	1/4" corrugated asbestos cement walls	Brick - 16-3/4" pilasters, 12-1/2" panels. Partition walls - 4" cinder block with plastering on the inside	
Type and thickness of floors		1st floor - 5" reinforced concrete slab 2nd floor - 4" reinforced concrete slab on steel beams, rubber tile	

	<u>Seaplane impact basin</u>	<u>Shop and office</u>
Type and thickness of roof	1/4" corrugated asbestos cement roof	Steel deck, 1" insulation and built-up composition roofing

Cost Summary

Structure	\$302,781.15
Cost per cu ft	1.096
Equipment	9,163.83

Detailed Costs

Structure		
Design	\$ 56,228.85	
Building construction	198,508.47	
Built-in mechanical equipment	17,869.47	
Built-in electrical equipment	<u>2,648.80</u>	
Technical and engineering services (10 % of structure costs - \$275,255.59)		\$275,255.59
		<u>27,525.56</u>
Inventoried mechanical equipment	8,503.91	302,781.15
Inventoried instruments	5.51	
Inventoried furniture	534.23	
Inventoried electrical equipment	<u>120.18</u>	<u>9,163.83</u>
Total to June 30, 1942		\$311,944.98

Main Contract

Construction of Impact Basin. Contract NAW-1200, Virginia Engineering Co.
 Started September 24, 1941; completed October 28, 1942 \$158,839.18