

Model Number : SBU
Model Name : Corsair
Model Type: Scout, Bomber



In 1932 the Navy again revived the two-seat project. As a result, Bureau of Aeronautics design number 113 was sent out to industry for bids. The main feature of this design was the use of the new Pratt & Whitney Twin Wasp engine. Eugene Wilson, who had been the engine section chief during development of the engine and was now the chief executive of Vought Aircraft, knew personally the political football the two-seat fighter concept had been. In order to ensure some return on investment for the two-seat fighter bid, he had it built structurally strong enough to

meet the design requirements for a dive bomber. This type of airplane had received interest in the Navy ever since the Marines had successfully used the O2U Corsairs as dive bombers in Nicaragua in 1929.

Proposals for the two-seat fighter were received from seven manufacturers. The Douglas XFD-1 and the Vought XF3U-1 were selected for construction and evaluation. With favorable reports from the Navy tests of the XF3U-1, Vought suggested the airplane be further tested as a scout bomber and replacement for the SU series of airplanes currently in the inventory. These tests showed the XF3U-1 had a projected range of 858 miles and a cruising speed of 150 mph compared to a range of 635 miles and a cruising speed of 130 mph for the SU's

Model Number : XF3U-1 and XSBU-1
Model Name : Corsair

Model Type: Fighter, Scout/Bomber



Only one airplane was built for the Navy and the first flight was in 1936. Rather than modify the XF3U-1, Vought decided to build a second airplane. The equipment and engine from the XF3U-1 were used. The airplane was delivered as one of the SBU-1's ordered by the Navy.

Two airplanes were built. One for the Navy that became XSBU-1 in 1933. Pratt & Whitney used the second airplane as a flying test bed. The plane was the first to feature a cockpit canopy. After extensive flight testing of the first aircraft, the Navy decided to convert it into a scout/bomber which required extensive strengthening. Rather than modifying it, Vought built a second aircraft (XSBU-1)

and transferred most of the equipment to it. The original airframe was used as an engine test bed by Pratt & Whitney.

Dimensions	
Wingspan	31.50 ft
Overall Length	26.50 ft
Height	10.92 ft
Weights and Capacities	
Empty Weight	3092 lb
Gross Weight	4643 lb
Useful Load	
Fuel Capacity	110 gal
Oil Capacity	8.5 gal
Powerplant Characteristics	
Type: P & W SG-1535-64	
Rating	700 hp
Displacement	
Weight	
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level	192 mph
Landing Speed, Sea Level	
Stall Speed, Sea Level	67.50 mph
Initial Rate-of-Climb	1300 ft/min
Cruise Speed, Sea Level	
Range at Cruise Speed	800 miles
Service Ceiling	24400 ft
Absolute Ceiling	
Crew: 2	
Armament: 2 fixed forward firing .30 caliber machine guns	

Model Number : XSBU-1
Model Name : Corsair
Model Type: Scout, Bomber



Only one airplane was built for the Navy and first flight was in 1936. Rather than modify the XF3U-1, Vought decided to build a second airplane. The equipment and engine from the XF3U-1 were used. The airplane was delivered as one of the SBU-1's ordered by the Navy.

Dimensions	
Wingspan	31.50 ft
Overall Length	26.50 ft
Height	
Weights and Capacities	
Empty Weight	
Gross Weight	
Useful Load	
Fuel Capacity	
Oil Capacity	
Powerplant Characteristics	
Type: 56-1535-64	
Rating	214 hp
Displacement	
Weight	
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level	
Landing Speed, Sea Level	
Stall Speed, Sea Level	
Initial Rate-of-Climb	
Cruise Speed, Sea Level	
Range at Cruise Speed	
Service Ceiling	
Absolute Ceiling	

Crew: 2	
Armament: 1 forward firing .30 caliber machine gun (rear seat) 1 flex .30 caliber machine gun in rear cockpit Provisions for bomb racks on lower wings	

Model Number : SBU-1

Model Name : Corsair

Model Type: Scout, Bomber

The SBU-1 evolved as a two-seat dive bomber version of the XF3U-1, which competed for the Navy two-seat fighter purchase to ensure that Vought got a return on its fighter investment. This aircraft was proposed as a land biplane replacement for the SU series. It became the first aircraft of its type to exceed 200 mph. It also featured a controllable-pitch propeller and NACA cowl and a twin row radial R-1535 P&W twin Wasp-Junior engine.

As expected, politics caught up with the two-seat fighter program and the Navy dropped it. Although the XF3U-1 had been evaluated as a scout/ bomber, Vought decided to construct another airplane rather than modify the XF3U-1. This airplane utilized the engine and most of the equipment from the XF3U1. It completed its first tests in 1934, and a contract for 84 SBU-1's was awarded in January 1935.



The SBU-1 was the first airplane of its type to exceed 200 mph and it also featured a controllable-pitch propeller and a new NACA cowl. It was the first Vought airplane with a canopy to protect the cockpit occupants. It also had adjustable cowling gills on the cowl trailing edge to obtain better control of the cooling air flow over the engine cylinders. This feature permitted greater speeds and soon became standard for all air-cooled engines that incorporated a deep-chord cowl. The design team headed by Rex Beisel of Vought and A. L. McCain and F.M. Thomas of Pratt & Whitney were awarded the prestigious Manley and Wright awards.

Dimensions	
Wingspan	33.25 ft
Overall Length	27.78 ft
Height	9.96 ft
Weights and Capacities	
Empty Weight	3562 lb
Gross Weight	5310 lb

Useful Load	
Fuel Capacity	145 gal
Oil Capacity	12 gal
Powerplant Characteristics	
Type: P & W "Wasp Junior" radial air-cooled R-1535-82	
Rating	700 hp
Displacement	1830 in ³
Weight	1460 lb
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level	180 mph
Landing Speed, Sea Level	
Stall Speed, Sea Level	69 mph
Initial Rate-of-Climb	1315 ft/min
Cruise Speed, Sea Level	
Range at Cruise Speed	548 miles
Service Ceiling	23700 ft
Absolute Ceiling	
Crew: 2	
Armament: 1 fixed machine gun, wing center section 1 flex machine gun in rear cockpit Provisiopns for bomb racks on lower wings	

Model Number : SBU-2

Model Name : Corsair

Model Type: Scout, Bomber

In 1937 the Navy placed an order for forty additional SBU's. These were designated SBU-2 and featured the improved Pratt & Whitney R-1535-98 Wasp engine. The SBU's gradually replaced the SU series in service. However, the airplane never achieved the widespread usage of its predecessors. One reason was that the Navy began the transition to monoplanes in lieu of biplanes, as the SBU was becoming operational. The increased threat of war in Europe hastened the introduction of monoplanes with better performance and improved characteristics. As a result, most



of the SBU's served in stateside training roles, and most were phased out of service in the early 1940's.

Dimensions	
Wingspan	33.25 ft
Overall Length	27.79 ft
Height	10.00 ft
Weights and Capacities	
Empty Weight	3753 lb
Gross Weight	5464 lb
Useful Load	
Fuel Capacity	145 gal
Oil Capacity	12 gal
Powerplant Characteristics	
Type: P & W "Wasp Junior" radial air-cooled R-1535-98	
Rating	700 hp
Displacement	1830 in ³
Weight	1460 lb
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level	180 mph
Landing Speed, Sea Level	65.50 mph
Stall Speed, Sea Level	
Initial Rate-of-Climb	1315 ft/min
Cruise Speed, Sea Level	
Range at Cruise Speed	850 miles
Service Ceiling	24000 ft
Absolute Ceiling	
Crew: 2	
Armament: 1 fixed forward firing .30 caliber machine gun 1 flex .30 caliber machine gun in rear cockpit Provisions for bomb racks on lower wings	

Model Number : V-142A
Model Name : Corsair
Model Type: Scout, Bomber

This airplane was a modified SBU-2

In 1936 Vought exported fourteen SBU-1's to Argentina under the V-142A designation. The Argentine models featured provisions for a 500-pound bomb and a rear seat gunner. The Argentines were so proud of their new airplanes that the first V-142A delivered was landed in the streets of Buenos Aires so the general public could view it. These airplanes served in the Argentine military well into World War II times before being retired.



Dimensions	
Wingspan	33.25 ft
Overall Length	27.78 ft
Height	10.00 ft
Weights and Capacities	
Empty Weight	3550 lb
Gross Weight	5445 lb
Useful Load	
Fuel Capacity	145 gal
Oil Capacity	12 gal
Powerplant Characteristics	
Type: P & W "Twin Wasp Junior" Model 1535	
Rating	700 hp
Displacement	1830 in ³
Weight	1460 lb
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level	208 mph
Landing Speed, Sea Level	
Stall Speed, Sea Level	65 mph
Initial Rate-of-Climb	1330 ft/min
Cruise Speed, Sea Level	
Range at Cruise Speed	687 miles
Service Ceiling	24200 ft
Absolute Ceiling	

Crew: 2
Armament: 2 fixed forward firing .30 caliber machine guns

Model Number : XSB3U-1
Model Name : Corsair
Model Type: Scout, Bomber



One two-place biplane was built for the Navy and first flight was in 1936. It was basically a SBU-2 with retractable landing gear. It was offered to the Navy at the same time as XSB2U-1 in case the monoplane was not bought by the Navy

Dimensions	
Wingspan	33.25 ft
Overall Length	27.79 ft
Height	10.00 ft
Weights and Capacities	
Empty Weight	3753 lb
Gross Weight	5664 lb
Useful Load	
Fuel Capacity	145 gal
Oil Capacity	10 gal
Powerplant Characteristics	
Type: P & W SG-1535-64	
Rating	700 hp
Displacement	1830 in ³
Weight	
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level	180 mph
Landing Speed, Sea Level	65.00 mph
Stall Speed, Sea Level	
Initial Rate-of-Climb	1315 ft/min

Cruise Speed, Sea Level	
Range at Cruise Speed	850 miles
Service Ceiling	24000 ft
Absolute Ceiling	
Crew: 2	
Armament: 1 fixed machine gun, fuselage (synchronized) 1 flex machine gun in rear cockpit Provisions for bomb racks on lower wings	