

Chance Vought Corp.

East Hartford, Conn.

1930 to 1938

The company was shaken by the death of Chance M. Vought on July 25, 1930 from septicemia (blood poisoning), but was able to continue its growth and complete the move to East Hartford because of the organization and plans he put in place. In August of 1930 Fredrick B. Rentschler was elected president of Chance Vought Corporation, succeeded in 1931 by Eugene E. Wilson.



In May of 1931, Charles M. Lighed, who was previously superintendent for the construction of the company's new East Hartford plant, was elected Vice President and Works (Manufacturing) Manager. Charles J. McCarthy, Vice President Engineer, was promoted to Vice President & Chief Engineer. In September of that year, Rex B. Beisel became Assistant Chief Engineer at Chance Vought after two years as Vice President and Chief Engineer of the Spartan Aircraft Company, Tulsa, Oklahoma. James M. Dean was factory manager; Joseph F. McCarthy was Secretary-Treasurer; Paul Backer was Assistant Secretary and Sales Manager; and J.J. Gaffney was Assistant Secretary & Treasurer.



Chance Vought Corporation was located in East Hartford, Connecticut, from 1930 to 1938, occupying three buildings having a total floor area of 190,305 square feet. The plant was adjacent to the Pratt & Whitney and Hamilton Standard plants.

Other interesting facts for the era are:

In 1931, the Corporation had 331 employees.

In July 1938 there were 696 hourly rated employees and 60 engineering employees. The average hourly rate was \$0.70

Events - 1931 – 1933

The company's first metal monocoque fuselage airplane, the XO4U-1, was built in 1931. In March of that year the U.S. Navy ordered 25 observation planes designated the O3U-1 Corsair from the Chance Vought Corporation with an award of \$400,455. Eventually the Navy ordered a total of 87 of these airplanes that were used for observation work with battleships and cruisers and for scouting with carriers. On battleships and cruisers, they were equipped with pontoons and were to be operated from catapults.



In July of 1931, the corporation announced the planned production of a new version of the O3U-1 with many improvements that would make it the fastest service-type aircraft built for the U.S. Navy. The airplane was designated the O3U-2 and was equipped with a 575-horsepower Hornet engine. Following a \$280,650

order for 15 O3U-2's, the designation was changed to SU-1 when the airplanes were assigned to the Marines. An additional 14 were added to the original 15. In November the Navy placed an order for 85 SU2, SU-3, and SU-4 airplanes. The contract amounted to \$3,000,000, with a schedule of fourteen months to complete deliveries. Chance Vought Corporation, at that time, had 330 employees. The schedule called for production of six planes each month until March 1, 1932, with a testing period from that date to June, 1932. After June, the schedule called for nine airplanes per month.



During 1932 and 1933, Vought sold various O3U airplanes to foreign countries; Argentina, Brazil, China, and England. These airplanes were given a V-65 or V-66 designation with a letter suffix to identify the customer. The 65 and 66 indicated whether the airplane was an O3U-2 or O3U-3 version. The Brazilian government ordered 37 Vought O3U-1 Corsairs, designated the V-65B.

Joseph F. McCarthy was replaced by E.K. Hubbard as Secretary-Treasurer in 1932.

On August 13, 1933, the Chance Vought Corporation passed a milestone in aircraft production: one thousand aircraft produced. Joseph L. McClane was named factory manager of the Chance Vought Corporation, succeeding James M. Dean

Events – 1934

In 1934, flight tests were completed on a new singleseat Corsair fighter having high performance and a long cruising range. The airplane was designated the V-80 and was armed with four fixed machine guns and two bomb racks. The land version had a top speed of 197 miles per hour and a cruising range of 760 miles. The V-80 was a development of the two-seat Corsair, using the same framework, fuselage, wings, tail, landing gear, and many other items of the equipment, all of which were interchangeable between the two types. The powerplant was a 700-horsepower Hornet. Three V-80P's were sold to Peru, one to Argentina, and eight to Germany as V-85G's (who used them to ferry air mail to and from the S.S. Bremen and S.S. Europa). Again the letter suffix identified the customer.



One V-90 was built as a demonstrator for foreign sales, resulting in the sale of 21 V-92C's to China, 12 V-93S's to Siam (72 built by Siam under license), one V-97 to Mexico, 10 V-99M's to Mexico, and one V-100 to Mexico. In 1978, a V93, the oldest existing Vought Aircraft, was on display in the Royal Thai Aviation Museum.

Phillip G. Johnson, President of Chance Vought Corporation's parent entity, the United Aircraft & Transport Corporation, proposed to the stockholders in April of 1934 to separate the manufacturing and transportation subsidiaries to conform with the bill passed by Congress that outlawed air mail deliveries by aircraft manufacturers. This reorganization took effect in May of that year and resulted in the formation of three new independent corporations: one to acquire stocks of the transport companies (United Airlines), another to acquire the stocks of the eastern equipment companies (United Aircraft Corp.), and a third to acquire the stocks of the western equipment companies (Boeing). These corporations replaced the previous United Aircraft &



Transport Corporation. Chance Vought Corporation was included among the companies which formed the new United Aircraft Corporation. The other companies were: Northrop Aircraft Corporation, Hamilton Standard Propellers Corporation, Pratt & Whitney Aircraft Company, United Aircraft Exports Inc., United Airports of Connecticut Inc., and the Sikorsky Aviation Corporation.

In 1934 J.J. Gaffney was promoted to Secretary-Treasurer, replacing E.K. Hubbard, and Joseph L. McClane became Factory Manager. Thomas A. Conlan was appointed Assistant Secretary and Joseph M. Barr was appointed Assistant Treasurer.

Events - 1935 – 1937

The corporation was awarded a contract for 84 scout/bombing planes for the United States Navy on January 4, 1935. The contract amounted to \$1,804,800, exclusive of engines and propellers. That same month, the corporation announced the planned production of a new scout/bomber to meet this contract. This model was to be considerably faster than any airplane previously made in East Hartford. It was an airplane which marked many Chance Vought Corporation firsts, including the first airplane with an all-metal cowling, and the first to be powered by the Pratt & Whitney Twin Wasp Junior engine, which developed 700 horsepower. Designated as the SBU-1, the



airplane was the result of three years of research. It was equipped with the latest development in cowling, the new cowl having adjustable trailing edge flaps, based on principles stated in a technical paper by A. Lewis MacClain, Rex B. Beisel, and F. M. Thomas of United Aircraft Corporation. The airplane was to have a speed in excess of 200 miles per hour and could operate from U.S. Navy aircraft carriers. The SBU-1 differed from previous Corsair types, particularly in aerodynamic “cleanness” provided by a completely enclosed cabin, large wing and tail fillets, and cuffs on the struts. External tail bracing was eliminated and the usual inter-aileron struts were concealed. The contract called for the 84 SBU-1’s to be completed by the end of 1936.

In January 1935 Rex B. Beisel, Assistant Chief Engineer of Chance Vought Aircraft Corporation, was one of three United Aircraft men to win both the Manley and the Wright medals for the outstanding aircraft technical paper of the year. The paper concerned the cowling and cooling of radial aircraft engines. The medals were presented at a banquet in Detroit by the Society of Automotive Engineers.

Features incorporated in the new cowling, part of which was designed by Rex B. Beisel, included:

Pressure baffles attached to the engine to direct cooling air against the cylinders.

The cowling itself shaped for best air-flow and minimum resistance (drag).

Control flaps attached to the cowl, which allowed the pilot to regulate the amount of cooling air to pass over the cylinders.

The effect of these features was to increase top speed in level flight and make it possible to use full throttle in climbing without overheating the engine. All these improvements were incorporated in the SBU-1 airplane.

Management changes in 1935 included changing the titles of three executives: Eugene E. Wilson (from President to General



Manager), Charles J. McCarthy (from Vice-President & Chief Engineer to Engineer Manager), and J.J. Gaffney (from Secretary-Treasurer to Assistant Secretary-Treasurer). Joseph. McClane was replaced by J.M. Barr as Factory Manager.

In 1936 the company completed and tested its first monoplane, the XSB2U-1.

In 1937 Rensselaer W. Clark was elected Vice President of United Aircraft Corporation airplane divisions and General Manager of Chance Vought Corporation and Sikorsky Divisions of United Aircraft.

Events – 1938

In 1938 Chance Vought Corporation celebrated its twenty-first year of business. In July of that year there were 696 hourly-rated employees at the Chance Vought plant and 60 engineering employees. The weekly hourly payroll was \$30,436 and the average hourly rate was 70.2 cents. The total number of employees at the end of the year was 846. The normal work week was five eight-hour days, with one full shift and a very small second shift. Employees averaged 1.2 overtime hours per week.

From 1934 to 1938, delivery requirements were such that the company was in a position to absorb practically 90% of the direct labor needed for fabrication of airplane parts from raw materials.

During the first half of 1938, Chance Vought Corporation continued work on a Navy contract that called for the delivery of 54 SB2U-1 two-place scout/bombers. Forty eight airplanes remained to be delivered as of January 1. In April, peak delivery was reached when 12 airplanes were delivered. Delivery of the last airplane was made in July, and delivery of spare parts, which was begun in January, continued until October.



Also in effect at the beginning of 1938 was a contract that called for the construction of 58 SB2U-2 two-place scout bombers, a more advanced model which superseded the SB2U-1. The design data and drawings pertaining to this contract were completed and delivered by August 11, and by October 24, tests and miscellaneous data had been completed for the Navy. The first SB2U-2 airplane was delivered to the Navy on August 30, and by the end of December an additional 27 had been delivered. The peak month for deliveries was December, when 15 airplanes were delivered to the Navy.

One XOS2U-1 experimental two-place observation monoplane seaplane (convertible to landplane) for which production began in the first part of 1938, was delivered to the Navy in October of that year. On February 1 the U.S. Navy invited Chance Vought to enter competition for single- and twin-engine fighter designs. Having rejected the idea of entering competition for designing a twin-engine fighter, Chance Vought submitted ideas for two single-engine fighters: the V-166A (F4U-1), built around the proven R-1830 Twin Wasp and the V-166B (F4U-1), which was to be powered with the XR-2800-2 Double Wasp engine, then in the experimental stage.



A U.S. Navy contract was awarded to Chance Vought Corporation on June 30, based upon the above proposals. It called for building of a one-place, single-engine, gull-wing, monoplane fighter. Preliminary negotiations for this contract were begun by R. W. Clark, General Manager, on June 6. First material orders were placed in July and shop work commenced that month. The remainder of this year was spent on design and the construction of a wind tunnel test model, later completed in February, 1939.

Another Navy contract, dated June 21, 1938, was awarded to Chance Vought for the XOS2U-1 experimental two-place scout observation airplane. This contract had been negotiated by C. J. McCarthy, Engineering Manager of the division, from June 1, 1937 until the date of the award. Material had been ordered and shop work on the contract started during January. Work during the balance of the year was concerned with the preparation of design data and drawings, which were delivered by January 1940. Fifty four OS2U-1's were delivered to the Navy in 1940. In 1941 and 1942, a total of 1164 OS2U-1's were delivered to the Navy, Argentina, Chile, Cuba, Dominican Republic, Dutch East Indies, Mexico, and Uruguay.



In October of 1938 a third contract was awarded by the U.S. Navy for one XSB2U-3 experimental scout-bomber, developed from the SB2U-1 and the SB2U-2 models. Shop work had already begun and material orders placed in April of 1938. This contract was also negotiated by C. J. McCarthy, who initiated proceedings in November of 1937.

In 1938 Chance Vought Corporation spent over \$282,000 for development and research, with \$71,711 committed to experimental contracts