

= Alfred V. Verville =

Alfred Victor Verville ( November 16 , 1890 ? March 10 , 1970 ) was an aviation pioneer and aircraft designer who contributed to civilian and military aviation . During his forty @-@ seven years in the aviation industry , he was responsible for the design and development of nearly twenty commercial and military airplanes . Verville is known for designing flying boats , military racing airplanes ( such as the record breaking Verville @-@ Sperry R @-@ 3 Racer ) , and a series of commercial cabin airplanes . His planes were awarded with the Pulitzer Speed Classic Trophy in 1920 and 1924 .

Verville was a founder of three aeronautical companies , the General Aeroplane Company , Verville Aircraft Company , and the Buhl Aircraft Company . He worked for General Billy Mitchell during his service at the United States Army Air Service from 1918 to 1925 . From 1937 to 1945 , he worked as a consultant for companies such as Douglas Aircraft , Curtiss @-@ Wright , Sned Aircraft , and Drexel Aviation . Verville spent the next sixteen years in the U.S. Federal government , primarily in the Bureau of Aeronautics , before retiring in 1961 .

Verville received many honors and awards , including a selection as a fellow of the Smithsonian Institution 's National Air and Space Museum in 1962 . An airmail stamp was issued in 1985 by the US Postal Service in Verville 's honor . In 1991 , he was posthumously inducted into the Michigan Aviation Hall of Fame .

= = Early life and career = =

Verville was born in Atlantic Mine , a small town in Michigan 's Upper Peninsula , on November 16 , 1890 , as the son of Victor Verville and Fabianna Miron . As a child , his mother bought him a Conyne @-@ style box kite from Sears Roebuck , which captured his imagination and started his interest in flight and aviation . Verville also began reading stories about the Wright Brothers in newspapers and magazines with great interest . Later he even wrote to the Wrights and Glenn Curtiss and received responses .

After graduating from Adams Township High School , Verville took a correspondence course in electrical engineering . He moved to Detroit , Michigan at the age of twenty , and from 1910 to 1913 he worked in the electrical departments of the Detroit Edison Company , Ford Motor Company , and Hudson Motor Car Company . By 1913 , Verville had made his mind up that he wanted to learn to fly . William Edmund Scripps , the editor and owner of The Detroit News , introduced Verville to Glenn Curtiss in July 1913 . Curtiss encouraged Verville to apply for his Spring 1914 flight school . Instead , Verville went to Hammondsport , New York in February 1914 , where Curtiss Aeroplane Company was located , and told Curtiss he wanted to work as an apprentice in his drafting and engineering shop . Curtiss agreed and this began Verville 's aviation career .

Verville excelled as a draftsman and designer , but still wanted to attend flight school and to become an exhibition pilot . After applying and being passed over three times for the Curtiss Flying School , Verville went to Curtiss , who responded : " No , Mr. Verville you don 't want to be a pilot . We can get all the pilots we want . What we want are designers . You 're [ really ] a designer and you don 't know it . " While at Curtiss Aeroplane , Verville took an active part in the development of the transatlantic flying boat America ( which was a Curtiss H @-@ 2 ) and the Curtiss Jenny of World War I fame . In the Fall of 1914 , Verville left the company and joined the Aeromarine Plane and Motor Company in New Jersey ; shortly thereafter , he joined the Thomas @-@ Morse Airplane Company . In March 1915 , he returned to Detroit and joined the General Aeroplane Company , where he led his first full design and build to his specifications , the Verville Flying Boat .

On July 9 , 1917 , Verville married Bertha M. Kamrath in Escanaba , Michigan . He had three children with her , daughters Betty and Janet , and son Myron . Also in 1917 , Verville left the General Aeroplane Company to become executive engineer of Fisher Body Corporation , where he supervised the construction of de Havilland DH @-@ 4 airplanes .

= = U.S. Army service = =

In June 1918 , Verville joined the Engineering Division of the U.S. Army Air Service ( USAAS ) as a civilian , and was based out of the USAAS Engineering Division at McCook Field in Dayton , Ohio . In 1920 , the young engineer gained national prominence when his Verville @-@ Packard R @-@ 1 Racer won the Pulitzer Speed Classic Trophy at the first held National Air Races ( at Roosevelt Field , New York ) by finishing first out of twenty four other planes , achieving a top speed of 156 @-@ 54 mph .

In 1919 Brigadier General William Mitchell requested the Engineering Division to design a light @-@ weight " motorcycle of the air " that could operate as a liaison between Army field units . Verville completed the Messenger design in early 1920 . The Lawrence Sperry Aircraft Company of Farmingdale was contracted to build five Messengers in April 1920 . The first Messenger flight was on November 1 . Later designated the Verville @-@ Sperry M @-@ 1 Messenger , the plane is notable for its small size , simple construction , and inexpensive cost , which made it ideal for testing and experimentation . The National Advisory Committee for Aeronautics used one in its pioneering aerodynamic research programs from 1923 to 1929 . Sperry modified twelve into the radio @-@ controlled Messenger Aerial Torpedo and developed the apparatus for a Messenger to make the first successful airship hook on and release in December 1924 .

Following World War I , in the capacity as an engineering advisor , Verville joined General Billy Mitchell and his aide , Lieutenant Clayton Bissell , on their sailing trip to Europe in December 1921 . The three men toured France , Italy , Germany , Holland , and England in order to check on the European progress of aviation . From their research they produced a 206 @-@ page report , which was published as an U.S. Army Air Service Information Circular . General Mitchell asked Verville to incorporate some of the European developments they had observed and to produce a plane for the U.S. Army Air Service 's participation in the upcoming 1922 National Air Races .

The resulting plane , the Verville @-@ Sperry R @-@ 3 Racer , was the second plane to utilize retractable landing gear and incorporated many features advanced for its time . The completion of the R @-@ 3 encountered challenges because the planned Curtiss D @-@ 12 engine was not available . So , instead Verville had to use the problematic Wright H @-@ 3 ( Hispano ) engine , which had major vibration issues . Three R @-@ 3 's competed in the 1922 National Air Races , but only one finished in 5th place with a top speed of 181 mph . After the 1922 race , Verville was able to finally obtain a Curtiss D @-@ 12 engine . It was installed on an R @-@ 3 and based on trials , it was determined that it could break a world record . On March 31 , 1923 , with Orville Wright officially observing from the ground , pilot Lieutenant Alexander Pearson , Jr. set a 500 km World Speed Record of 167 @-@ 73 mph ( 269 @-@ 94 km / h ) over a 10 @-@ lap course at Wilbur Wright Field . For the 1924 National Air Races , his R @-@ 3 won the 1924 Pulitzer Speed Trophy at 216 mph .

While at the Air Service , Verville was awarded eight aeronautical patents for technologies such as airplane truss design , radiator mounting , and an automatic gun mechanism .

= = Buhl and Verville Aircraft Companies = =

In 1925 , Verville left the government service to co @-@ found the Buhl @-@ Verville Aircraft Company with the Buhl family in Detroit . On March 29 , 1927 , Buhl was awarded the first Approved Type Certificate for its Buhl @-@ Verville CA @-@ 3 Airster ( i.e. A.T.C. No. 1 ) issued by the Aeronautics Branch of the Department of Commerce on March 29 , 1927 . There were a total of 20 of this aircraft manufactured and it broke a number of speed and endurance records , placing at the top of the Ford National Reliability Air Tour and the National Air Races . Verville was the chief designer from the company 's founding in 1925 until 1927 .

In 1928 , Verville left Buhl @-@ Verville to establish the Verville Aircraft Company , also in Detroit . The company sought to market planes to the wealthy private owner . Verville Aircraft produced the Verville Air Coach , a four passenger , high @-@ wing monoplane , which made its debut at the 1929 Detroit Air Show and the Verville Sport Trainer , a two @-@ seat tandem biplane . The United States Army Air Corps purchased 4 Sport Trainers under the designation YPT @-@ 10 . The USAAC tested with 5 different engine versions resulting in YPT @-@ 10 thru YPT @-@ 10D

designations .

= = Bureau of Air Commerce and consulting = =

Verville joined the Aeronautics Branch of the Department of Commerce in 1933 . The Aeronautics Branch became the Bureau of Air Commerce in 1934 . During his time there , Verville served in the following roles : aeronautical engineer ; chief of the Manufacturing , Engineering , and Inspections Service ; and finally assistant chief of the Aeronautic Development Section . In his role as chief of the Manufacturing , Engineering , and Inspections Service , he was in charge of the reviews for issuing type certificates for all manufactured airplanes .

Verville left government service to be a consultant for companies including Douglas Aircraft ( 1937 ? 38 ) , Curtiss @-@ Wright ( 1941 ? 42 ) , Snead Aircraft ( 1942 ) , and the Drexel Aviation Company ( 1942 ? 45 ) . Verville briefly returned to the Bureau of Air Commerce from 1939 @-@ 1941 .

= = U.S. Navy service and retirement = =

In 1945 , once again returning to government service , he joined as a member of the Naval Technical Mission to Europe , and later , the U.S. Navy 's Bureau of Aeronautics ( 1946 ? 61 ) . At the Bureau of Aeronautics , from 1950 until his retirement in 1961 , Verville was a technical advisor and consultant to the director of the Technical Data Division . Verville retired in 1961 and moved to La Jolla , California . He died on March 10 , 1970 from a heart attack at age 79 .

= = Honors = =

In 1962 , Verville was selected as a fellow of the Smithsonian 's National Air Museum . He was honored with ten Certificates or Letters of Commendation from the U.S. Armed Forces . He was an Honorary Fellow of the Society of Experimental Test Pilots and was named an Elder Statesman of Aviation by the National Aeronautic Association in 1956 . In 1961 , he was elected as a fellow of the American Institute of Aeronautics and Astronautics . In 1991 , he was posthumously inducted into the Michigan Aviation Hall of Fame .

The Smithsonian National Air and Space Museum established the Verville Fellowship in his name , which is a competitive nine @-@ to @-@ twelve month in @-@ residence fellowship for researching the history of aviation . Over 20 boxes of material from Verville 's estate are housed at the Smithsonian Air and Space Museum 's Garber Facility . A 33 cent United States Postal Service airmail stamp was issued on February 13 , 1985 , bearing Verville 's name , picture , the text " Aviation Pioneer " , and an image of his Verville @-@ Sperry R @-@ 3 Racer low @-@ wing monoplane .

= = Planes designed by Verville = =

Over the course of his forty @-@ seven years in designing and building planes , Verville contributed to the design and development of nearly twenty different aircraft . A plane he designed , the Verville @-@ Sperry M @-@ 1 Messenger is on permanent exhibition at the National Air and Space Museum 's Steven F. Udvar @-@ Hazy Center . Another plane he designed , the Verville @-@ Sperry R @-@ 3 Racer won first place at the 1924 Pulitzer Trophy Races . In June 1961 , it was honored as one of the twelve most significant aircraft of all time by Popular Mechanics and it was featured on a USPS airmail stamp issued in 1985 .

= = = Curtiss Aircraft Company = = =

Curtiss Jenny ( 1914 )  
famous WWI plane

Verville contributed to design  
America ( 1914 )  
first plane of Curtiss H @-@ 2 line  
planned to be first transatlantic flight , but interrupted by WWI  
transatlantic flying boat

= = = General Aeroplane Company = = =

Verville Flying Boat ( 1916 )  
2 passenger , open cockpit , biplane , flying boat  
100 hp Curtiss OX @-@ 5 or Maximotor pusher  
Mahogany hull and wing floats constructed by Mayea Boat Company ( Detroit )  
Gamma S ( 1917 )  
A two @-@ seater , open cockpit , floatplane , biplane with an 80 hp Le Rhône pusher engine .  
Gamma L ( 1917 )  
Similar to Gamma S , with wheels .  
Twin floats were replaced with wheels for winter operations off the ice of Lake St. Clair .

= = = U.S. Military = = =

Verville @-@ Clark @-@ Pursuit 1 & 2 ( 1920 )  
Function : fighter ( also known as VCP @-@ 1 / 2 )  
Two VCP @-@ 1 and two VCP @-@ 2 built  
VCP @-@ 1 re @-@ designated VCP @-@ 1A & R @-@ 1 Racer , VCP @-@ 2 redesignated PW  
@-@ 1 & PW @-@ 1A  
While at the Engineering Division and Aeronautical Systems Center of the Signal Corps - post @-@  
World War I : November 11 , 1918 @-@ September 1919  
Verville @-@ Packard R @-@ 1 Racer ( 1920 )  
Function : racing ; crew : 1 ; engines : 1x 638 hp Packard 1A @-@ 2025 V @-@ 12  
On November 27 , 1920 , Captain C. C. Moseley , flying a Verville @-@ Packard VCP @-@ R ,  
won the Pulitzer Trophy Race at Mitchel Air Force Base. with a maximum speed of 177 miles per  
hour ( 285 km / h ) .  
While in the Air Service  
Verville @-@ Sperry M @-@ 1 Messenger ( 1921 )  
Function : messenger , manufactured by Sperry Aircraft Company  
This plane is exhibited in the National Air and Space Museum 's Steven F. Udvar @-@ Hazy  
Center .  
Verville @-@ Sperry R @-@ 3 Racer ( 1922 )  
Participated in the 1922 and 1924 Pulitzer Trophy Races ; won first place in 1924 . In June 1961 , it  
was honored as one of the twelve most significant aircraft of all time by Popular Mechanics .  
Engineering Division TP @-@ 1 ( 1923 )  
Was a two @-@ seat biplane fighter designed by Alfred V. Verville and Virginus E. Clark at the  
United States Army Air Corps Engineering Division .  
Prototype TP @-@ 1 was built as the XTP @-@ 1 and tested at McCook Field in 1923 .  
YPT @-@ 10 ( 1925 ) , Primary Trainer  
Similar design to Verville Sport Trainer AT  
While at the Air Corps

= = = Buhl @-@ Verville = = =

Buhl @-@ Verville CA @-@ 3 / CW @-@ 3 Airster ( 1925 ? 1926 )  
CA @-@ 3 Airster , 200 hp Wright J @-@ 4 engine  
CA @-@ 3A Airster , 225 hp Wright J @-@ 5 engine

CW Model 3 OX5 Airster , 90 hp Curtiss OX Model 5 engine  
CW Model 3 Wright Trainer , 220 hp Wright J Model 5 engine ( short military trial )  
Also known as : J4 / J5 Airster or B Model V Airster

=== Verville Aircraft Company ===

Verville Air Coach ( 1929 )

four passenger , high Model wing cabin monoplane designed in 1927 by Verville

Model 102 ( Model W , Warner Engine )

Model 104 Model C

Model 104 Model P ( Packard Diesel Coach )

Verville Sport Trainer ( 1930 )

This plane is in storage in the Smithsonian Institution system ; its engine was a Packard DR Model 980 .