

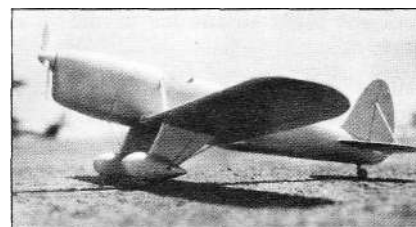
An Aircraftsman's Album



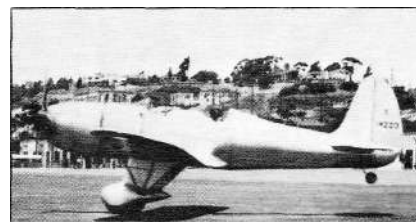
Dan Burnett has always known what he wanted to do as a vocation, and an avocation, for the two are inseparably mixed so far as he is concerned. In San Diego today he is rebuilding a Curtiss JN-4 for the San Diego Aerospace Museum — a hobby in retirement — after a lifetime spent building airplanes.

The lifetime in aviation started when, as a boy in junior High school, he organized an aviation club. Later, attending Memorial Junior High School in San Diego, he obtained a surplus Sopwith One-and-a-Half Strutter from the Navy for a school project. He worked this through the local Congressman and paid the One Dollar fee, but it was stipulated that the airplane could not be flown. Several years later Dan obtained the same airplane again — the school could no longer use it — and made it airworthy. After a succession of operators it finally wound up in Mexico.

Officially, Dan's career in aviation began when he quit high school in 1924 to go to work full-time for T. Claude Ryan at the munificent sum of \$1 per day. (After a year his salary was doubled — to \$2 per day). But even before this, he had been Ryan's first employee as a non-paid associate, working as roustabout helper. Ryan and his men rebuilt several Standard J-1's for passenger carrying in sight-seeing flights and Ryan's fledgling airline. Burnett stayed right along, helped rebuild the Douglas Cloudster into the airliner for the Los Angeles-San Diego Airline. It was off-again on-again work, typical of the first decades of aviation, but Dan was in company with Lloyd Royer, Bill Water-



Top, "Dapper Dan" Burnett with a production model Ryan ST, NC17303. It was proudly displayed before the Ryan building in San Diego, then a showplace of the 1930's. Above, the whole thing started with an idea of T. Claude Ryan, exemplified by a scale model. Below, the prototype takes off in its first flight, June 8, 1934. Burnett's comment in his photo album, "What a thrill."



house, Martin Jensen, Hawley Bowlus, Vance Breese, J.B. Alexander, B.F. Mahoney, George Allen, and Charles Lindbergh, and many others of noted fame in later years. Then came the building of the SPIRIT OF ST. LOUIS, told about so well in Wagner's *Ryan, The Aviator*, and nearly instant world fame for the Ryan company.'

Claude Ryan stayed on in the flying school business after the B.F. Mahoney company branched off, and built it into one of the most successful, the Ryan School of Aeronautics. Even in the Depression years it was a comer and by the mid-1930s was becoming an outstanding success. Burnett came back to the newly formed Ryan Aeronautical Co. in 1931, after a stint with the Bowlus Sailplane Co. In 1933 another former acquaintance of Ryan's rejoined him, Millard C. Boyd, as Chief Engineer. With Will Vandermeer and Ryan, Boyd designed the S-T (Sport Trainer).

Building the prototype S-T was the project of the Ryan School students, led by a crew consisting of Mel Thompson, Bert Matthews, Ed Morrow, Bob Kerlinger, Johnny Fornasero — and Dan Burnett. Our pictures here, from the album of "Dapper Dan" as he was known in later years, show the construction of the prototype. Begun in late 1933, it was rolled out for its first flight in the hands of Johnny Fornasero in June 1934. The first test hop was June 8th, and soon afterward Ryan flew it to Los Angeles for inspection by Department of Commerce, Bureau of Aeronautics inspectors. The A.T.C. — Approved Type Certificate — No. 541 was gained shortly and the airplane went back to the Ryan School for shakedown operations. A few days before Christmas one of the students, Sanford Baldwin, crashed in San Diego Bay while practicing aerobatics. It was no fault of the airplane, and in 1935 the orders started coming in. The Ryan ST and the PT series became widely used and world renowned. Some 1500 were built, and many of them survive today as classic antiques.

Along the way Dan learned to fly. He took lessons in the first airplane licensed by the City of San Diego (in the days before the Civil Aeronautics Administration). His solo date was Feb. 14, 1926, and Doug Corrigan learned to fly in the same airplane, a Curtiss JN-4, the OX-5 Jenny. The flight instruction was a Christmas present to Dan from Claude Ryan and B.F. Mahoney.

Burnett stayed on with Ryan until well into World War II. He was picked to head the H.J. Heinz War Production plant at Pittsburgh, then, as the War wound down, came back west again to head the experimental department at Rohr Aircraft Co., finally retired in 1970. He keeps up a lively activity at the San Diego Aerospace Museum, rebuilding the Jenny, and is described by his associates there as "wood worker par excellence" and " . . . inspiring everyone with his enthusiasm." He said recently, "In 1908 I saw a moving picture story about airplanes, and have been a nut on the subject ever since." He witnessed the Earl Ovington-Claude Graham White race from Waltham, Mass., to Boston in 1910, was in the crowd witnessing the first air mail flight from Washington to New York in 1918. A year later he saw the Curtiss NC- boats fly in formation, and came west in 1920 to see an air meet at Crissy Field, San Francisco. He helped the Jacuzzi Brothers with their airplane in Berkeley, as unpaid volunteer in 1921.

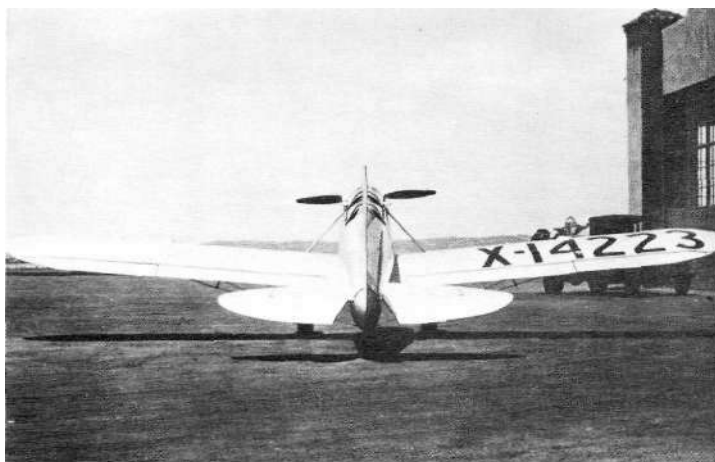
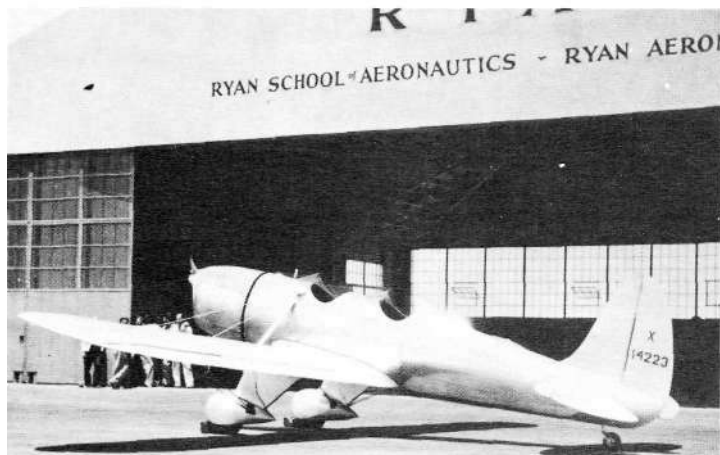
Never away from the circle of aviation, Dan remembers most vividly the intensive three months' work on the SPIRIT OF ST. LOUIS. He keeps in touch with many of the persons who comprised that crew, most of whom are still extant, and is proud of his photograph taken with T. Claude Ryan and Charles A. Lindbergh in 1972. The occasion was on completion of "Project WE," the installation of the replica SPIRIT in the San Diego Aerospace Museum. He and his wife Margaret keep carefully preserved in their scrapbook a California carnation, carried by "Lindy" from San Diego to Paris so many years ago on his epic flight, a supreme memento of a lifetime in aviation.

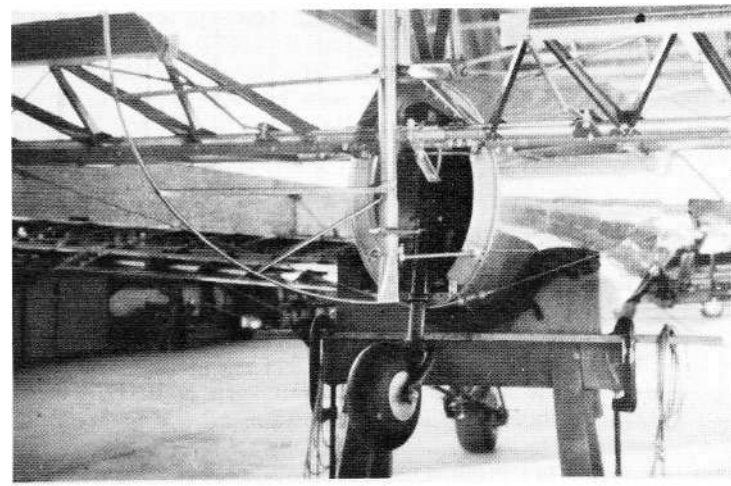
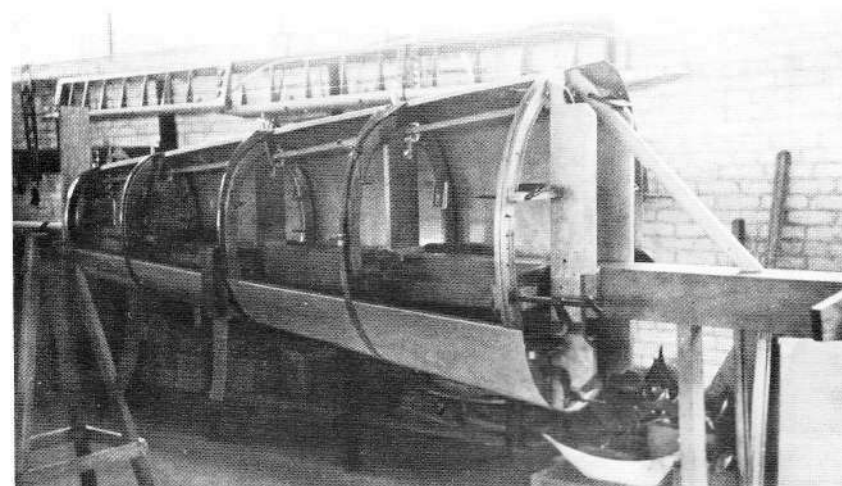
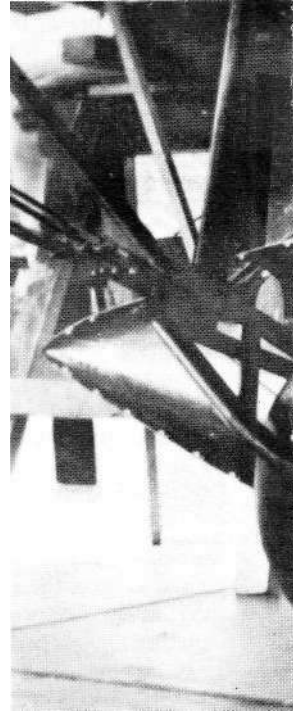
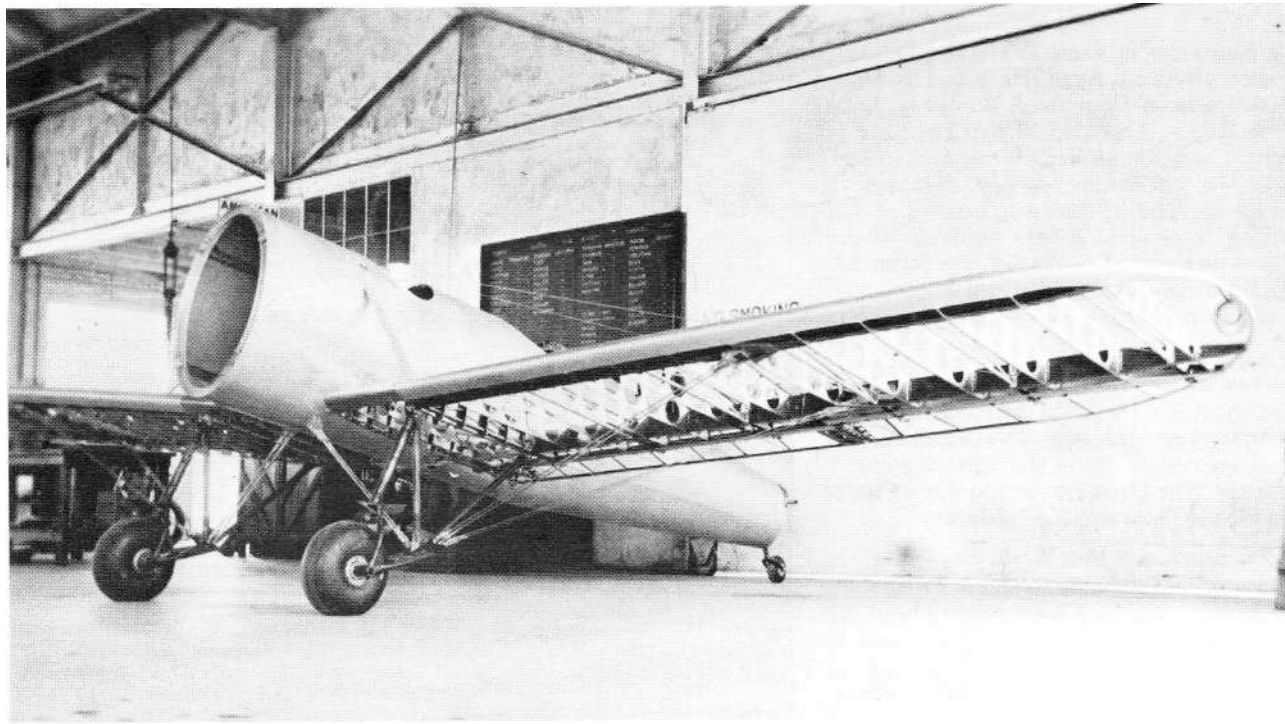
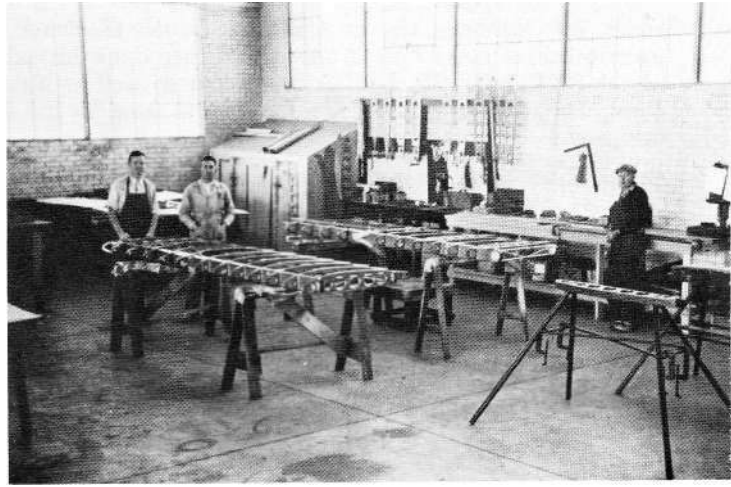
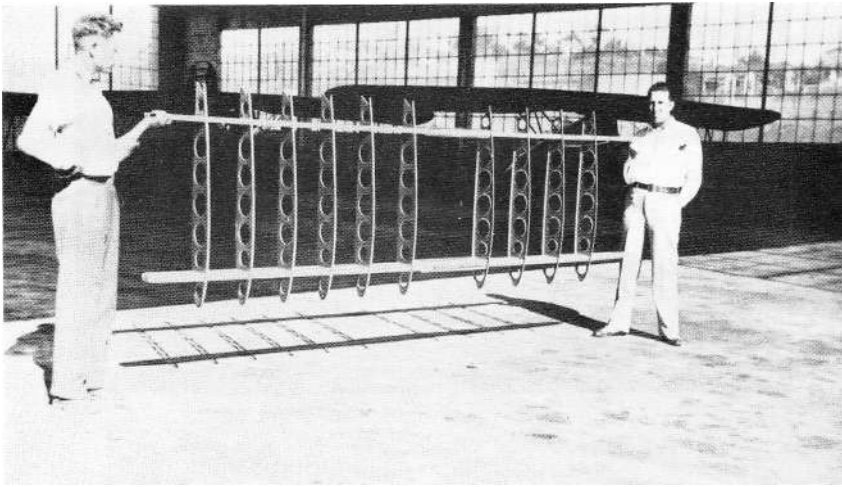


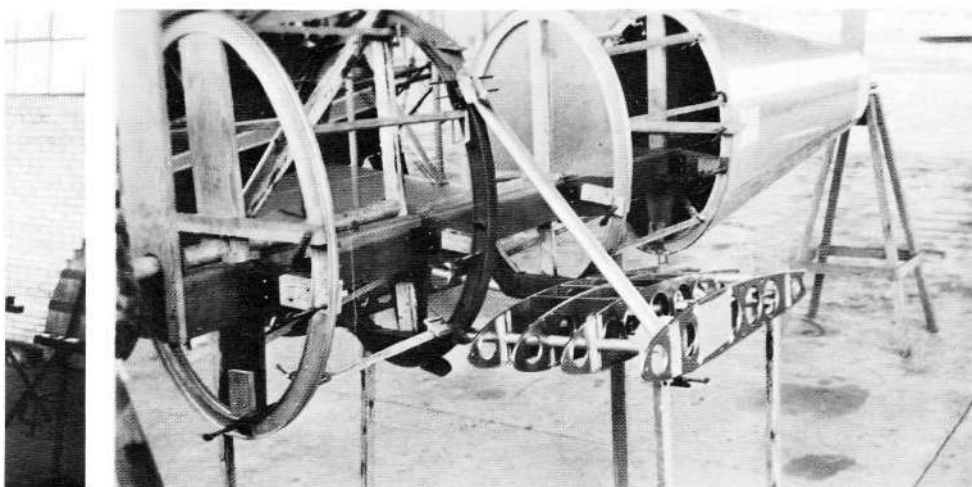
"A Beauty."

The left front view shows the "X" on the lower wing surface, later to be replaced by "N." In the background, a refueling truck that would be an antique today, too, and the hill overlooking San Diego Bay and Lindbergh Field.

Below, at high noon, the prototype out for portraits. Some of the students turned out to watch — they, too, had a vested interest. Dan Burnett's comment, "A beauty," was appropriate.



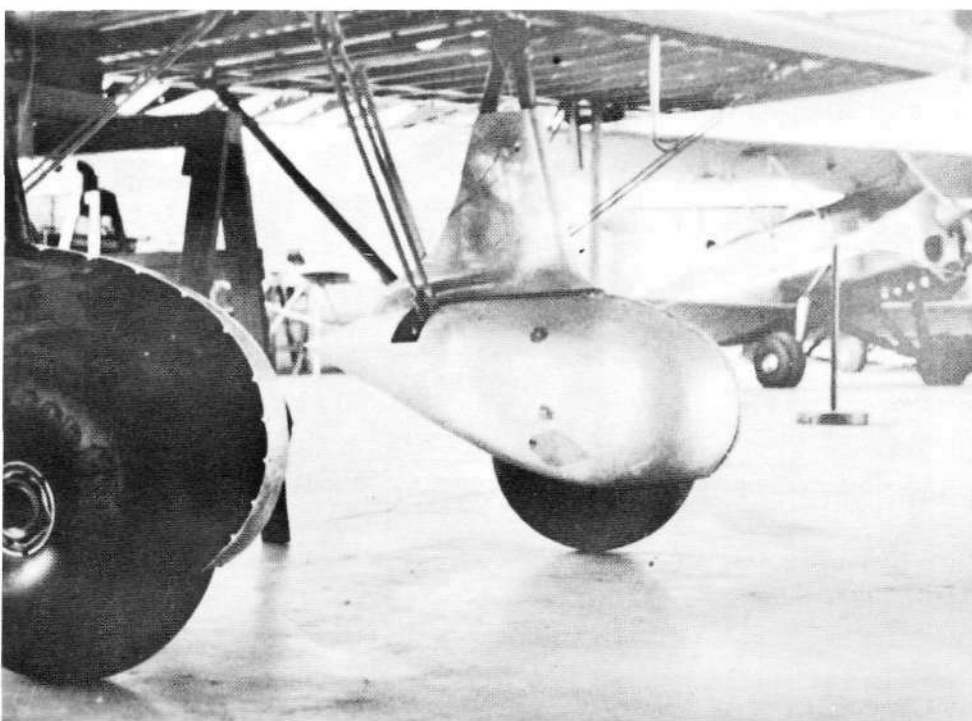




"We have actually started left wing panel —
Stub Wings Mounted on Fuselage.
No. 2 Ring is Heat-Treated Steel,
others are Dural 17ST."

Dan Burnett supervised the construction in the shop, utilized the part-time help of the students of the Ryan School of Aeronautics. Dan and helper Ed Morrow support the left wing, constructed on simple saw horses in the corner of the shop (center).

Claude Ryan managed a deal with Adm. Towers at North Island across the bay to get his heat-treating done. The "17ST" was a relatively soft but strong and workable aluminum alloy widely used before the War.

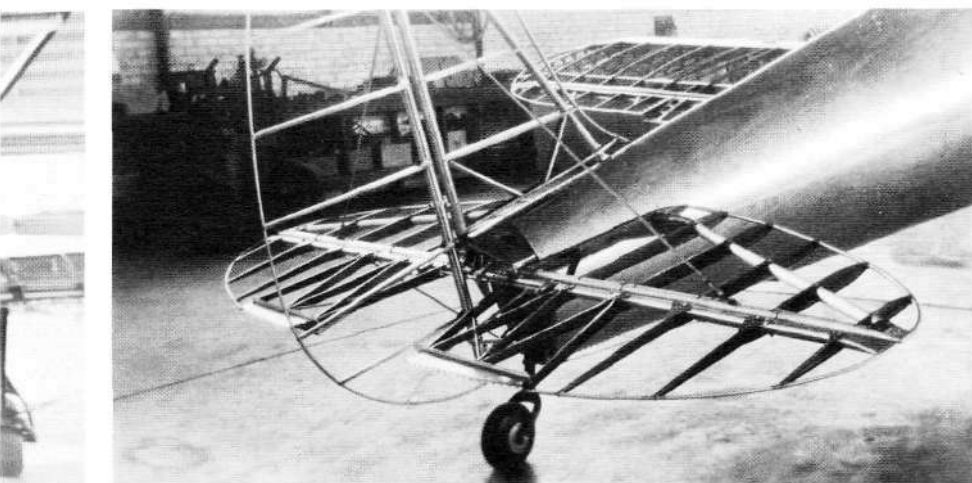


"Showing the fuselage set up, and a good
deal of the wing structure.

The landing gear and its streamlining.

Note the wire bracing."

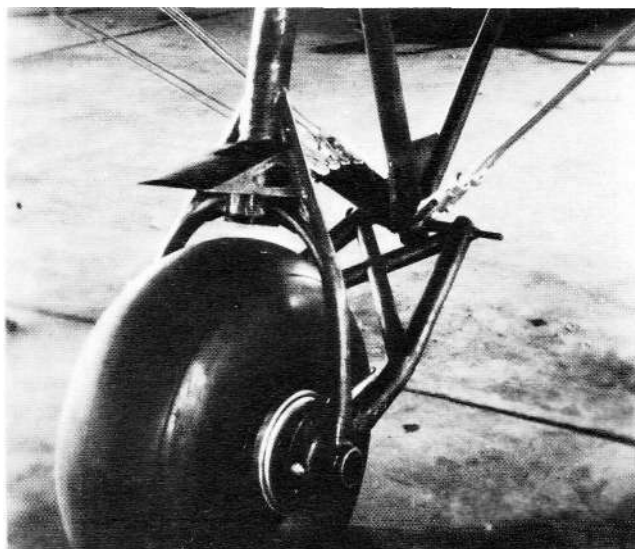
Left, for the record, the wing and fuselage were mated for this structures picture just prior to mounting the tail group and covering with fabric. Later the individual frames were covered before final assembly.



"The Fuselage Takes Shape — the second sheet
of skin in place on the lower ring. Note the jig.

"The Tail Group in Place and Rigged."

At far left, Burnett's reference to "jig," was to the 4 x 6 inch wooden beam to which the fuselage formers were clamped. The completed framework of the ailerons and flaps hung on wall at rear.



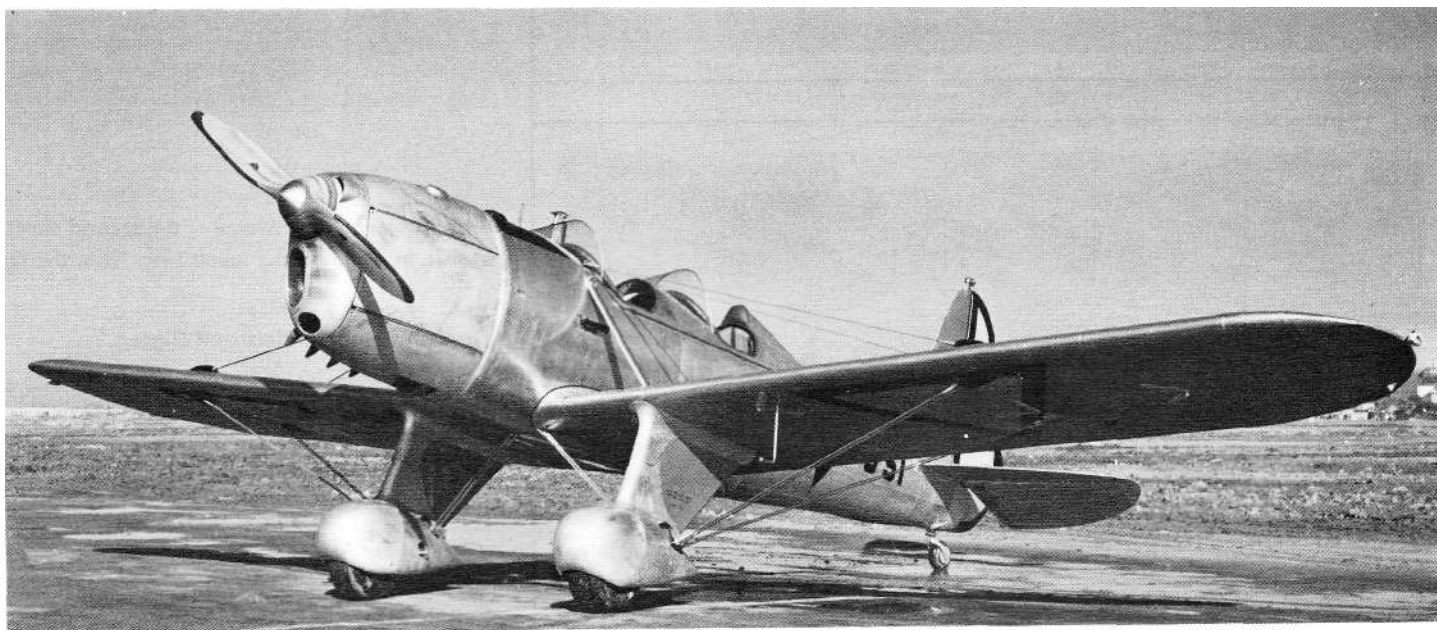
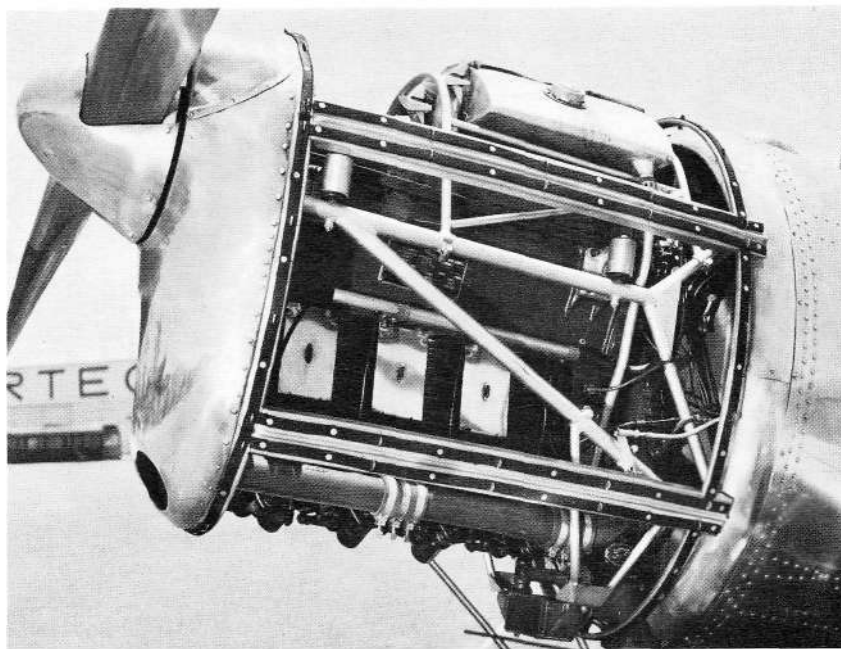
"The First Air Shot."

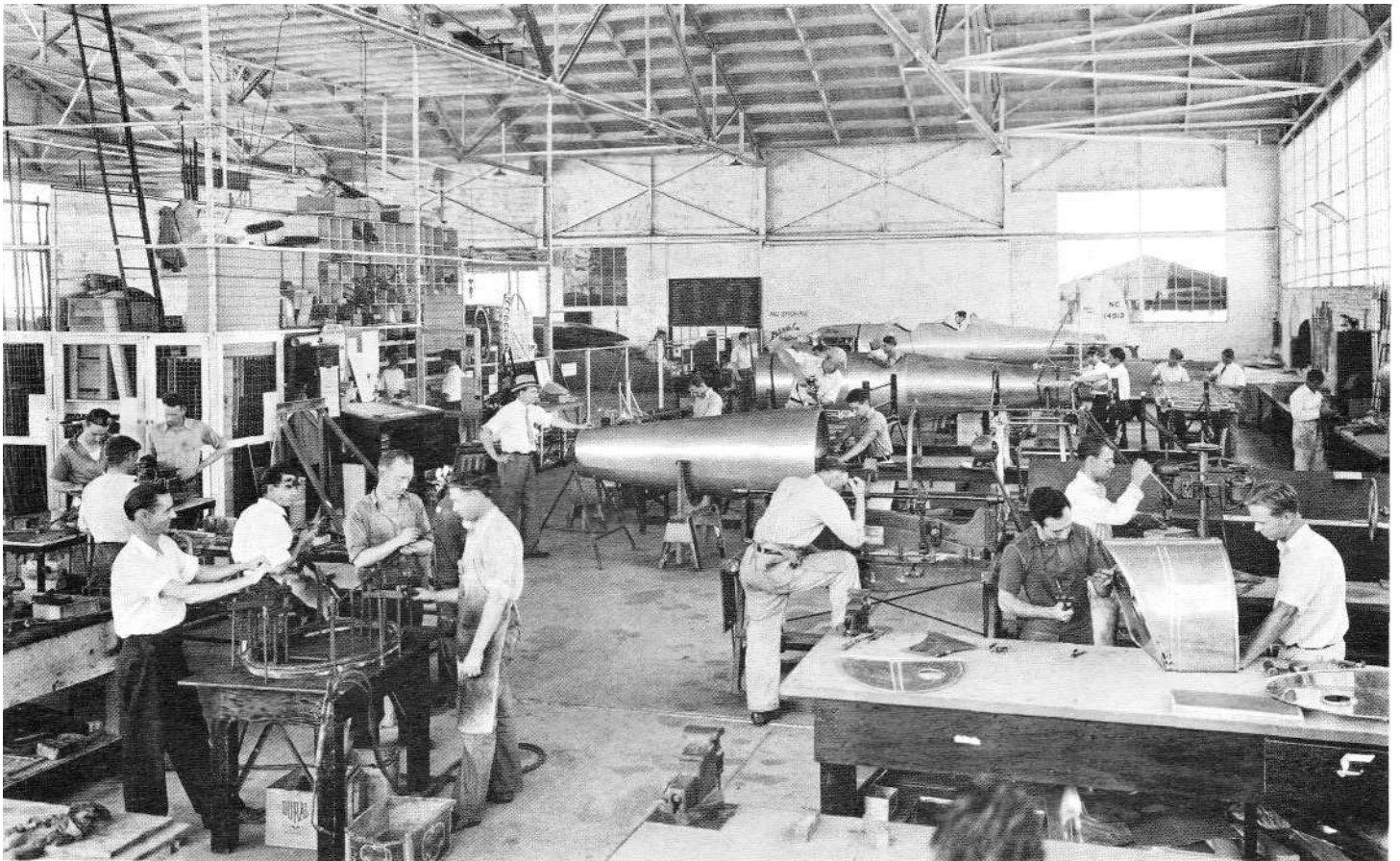
The pictures of the newly born Ryan S-T were made on its first flight date by H.A. "Jimmy" Erickson, photographer of the air scene in and around San Diego for many years.

Above right, , landing gear represented the best in the state of the art in the mid-1930's, and took from several clean racing designs in appearance and bracing. As the most complicated part of the structure of the S-T it utilized balloon airwheels, streamlined wires, deep-formed housings.

The Menasco B-4 Pirate engine of 95 horsepower weighed 249 pounds, was mounted on rubber shock-mounts attached to the tubular structure of the engine mount. Its simple design supported the oil tank, oil cooler, and all fairing and cowlings.

At the height of the S-T production, this was an example of its classic lines, form and workmanship that enthuse the antique airplane buff. Dan Burnett's album captions expressed something of this feeling when his photo album was compiled in 1935. This was one of 20 made later for Cuba.





These two views of the assembly and fabrication areas of the Ryan School of Aeronautics were made in latter 1935 as production got going for the sport-plane market. 27 men were producing one S-T every second week, but of course later, as pre-war military orders came the whole operation was done in new and larger facilities. (Photos— "Erickson 35-152-1 (Upper) and 35-119-2 (lower)"





Two of the early production models, one of them NC14982, graced the Pan Pacific Auditorium Aircraft Show in 1935. Held in Los Angeles, the exhibition gave wide exposure to the new sportplane, with appropriate publicity for the Ryan School of Aeronautics.

Below left, Millard Boyd was also an aviation pioneer, built a pusher type monoplane and taught himself to fly when only a boy of 17, at his home near Chadron, Nebraska. (Courtesy of William Wagner)

John Fornasero, Chief Test Pilot, T. Claude Ryan, Millard C. Boyd, and Will Vandermeer. Fornasero later went with the Bureau of Air Commerce and to Boeing as test pilot.

Below, "The Gang." The students and instructors at the Ryan School that helped build the ST, X14223.





Top left, Sanford Baldwin about to take off in the prototype Ryan S-T.

Top right, the remains of the prototype after it was crashed in San Diego Bay, fatally for the student, Sanford Baldwin, who was doing aerobatic practice.

Above left, Hawley Bowlus, Dan Burnett, and Fred Rohr with the extra spinner made for the SPIRIT OF ST. LOUIS, and which was signed by most of the persons who worked on the SPIRIT. The entire crew were: B.F. Mahoney, W.H. Bowlus, Donald Hall, A.J. Edwards, J.J. Harrigan, John Van Der Linde, Frank Say, Fred Rohr, Dan Burnett, Henry Hunold, Ruth Kennaugh (later Mrs. Clemens), Ed Morrow, Doug Corrigan, Dale Powers, Bill Van Den Akker, Ed Krauscyk (later changed name to Crosby), Walter Locke, L. Boyd, L. Muehleisen, B. Jones, Mrs. L. Bray, Gus Eoff, Fred Magula, George F. Hammond, C. Randolph, Clair Rand, Doug Kelley, William Bodie, Andy Anderson, W.B. Crawford, Lon Wheeler, Georgia Mathias (later Mrs. Borthwick), Burt Tindale, Peggy DeWitt, June Eddy, O.R. McNeal, Shirley Morrison, Ed Terry, Pat Davenport, John Lester, Gordie Boyd, Jessie Cooper (now Mrs. Walter Locke), Charles A. Lindbergh, John Stoner, H.A. Erickson, Albert C. Crygier, Helen Thorpe (Mrs. Hendrix), Charlie Miller, Charlie Hansen, and Vernon Friedman.

Above right, the JOSEPHINE FORD, Cdr. Richard Byrd's airplane, came to San Diego in early 1927, and among those who turned out to look were many of the crew of the SPIRIT. Standing, in order from the left: 3rd - Burt Tindale, 5th — John Van Der Linde, 6th - Peggy DeWitt, 7th Georgia Mathias, Jessie Cooper. Kneeling, from left, 3rd — Bill Van Den Akker, 5th — Dan Burnett, and 7th — Pat Davenport.



In 1972 the replica SPIRIT OF ST. LOUIS, constructed by Frank Tallman and his Tallmantz Aviation for the 1967 Paris Air Show, was purchased by funds subscribed by the citizens of San Diego and dedicated in the San Diego Aerospace Museum. Dan Burnett, shown here with T. Claude Ryan and "Lindy," was the prime mover in "Project WE" for the refurbishing and dedication. The story of the construction of this replica was given in Tallman's *Flying the Old Planes*.