

The Curtiss Kingbird

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One of Eastern Air Transport's Kingbird fleet, NC621V warms up its engines.

Photo: Peter M. Bowers Collection

It was just seventy years ago that the Curtiss Aeroplane and Motor Company sought to develop a small-to-medium sized transport aircraft for its potential commercial customers. The trend of the industry was away from the manufacture of biplanes and heavy, uneconomical, multi-engined aircraft. The best configuration for use of the infant airlines appeared to be a light, 2-engined monoplane for 6 to 8 people.

Accordingly, in 1929, the engineering staff at Curtiss set to work on the design of a high-winged, duralumin tube and fabric transport, powered by two Curtiss Challenger engines of 170 hp each. The new airplane followed a long series named for feathered members of the world's aviaries. That chosen for this airplane was "KINGBIRD" (Zoological: *Tyrannus Carolinensis*), a member of the flycatcher family, and common in the southern United States. It was hoped to be a worthy avian successor to a long line of already famous Curtiss Hawks, Falcons, Larks, Condors and Robins.

The design of the Kingbird, said by some to be simply an enlargement of the Curtiss Thrush, is attributed to Chief Engineer Theodore P. Wright, and F. Al Wedberg, in charge of development at the Curtiss plant at Garden City, Long Island, New York. The prototype was approved for license on July 27, 1929.

To those who first saw it rolled out on Curtiss Field, the original "Kingbird No. 1" appeared a bit unconventional. It had a large tail assembly; a long single stabilizer/elevator joining vertical fins and high rudders with elliptical tops. The

engines hung on a braced structure below and in advance of the high wing. The arcs of the propellers nearly converged just ahead of the bulbous nose of the fuselage. Having two engines was, of course, the major Kingbird safety concept. Located in such close proximity, in the event of failure of one engine, the airplane would not yaw suddenly to right or left, but continue on, albeit under reduced power. In competent hands, this ability was featured again and again in pilot demonstrations.

The engineers tinkered with the design of the Kingbird for nearly a year. They changed the configuration of the tail assembly, adding an upper stabilizer. The rudder tops were lowered, and cut-outs made for the elevators. Flight-testing showed the new plane to be notably underpowered. As a result, it was converted to six-place, with two Wright R-760 engines of 225 hp each, and still later to two of 240 hp. Now called the "Model J" as re-manufactured on October 30, 1929, the "Kingbird No. 1" received Approved Type Certificate, Group 2-122 on September 6, 1929.

After three Kingbirds were built on Long Island, it was decided to transfer production to the newly-established Curtiss-Wright Airplane Company at Lambert Field in Robertson, Missouri, near St. Louis. Flight testing continued under the direction of veteran Curtiss test pilot H. Lloyd Child.

The first sale of the new Kingbird was in April, 1930, when Pan American-Grace Airways, Inc. bought the second



The first Kingbird, r/n 3133.

Photo: Curtiss T-4900, Sept. 16, 1929 via Peter M. Bowers Collection

of the original trio. In July, Eastern Air Transport ordered a dozen, and, despite the economic depression, the Missouri factory went into production of their new airliner.

This, then, is an account of the highlights connected with the Curtiss Kingbirds—nineteen aircraft which played a small, but important role in the development of commercial aviation.

Curtiss Kingbird (Curtiss Model 55)— Individual Histories

Model C

c/n 1

Reg. no. 3133

Manufactured May 1, 1929 by Curtiss Aeroplane & Motor Co., Garden City, NY. Two Curtiss Challenger R-600 engines of 170 hp each (c/n's 87-88). 6PCLM. Identified registration number to Curtiss May 10, 1929. NC license approved July 22, 1929, to experimental August 1, 1930. Converted to Model J under ATC Group 2-122, with Wright R-760 engines of 225 hp each. 6PCLM. License issued Sept. 6, 1929. Accident at Garden City, NY July 23, 1930. License cancelled at request of manufacturer.

Model J

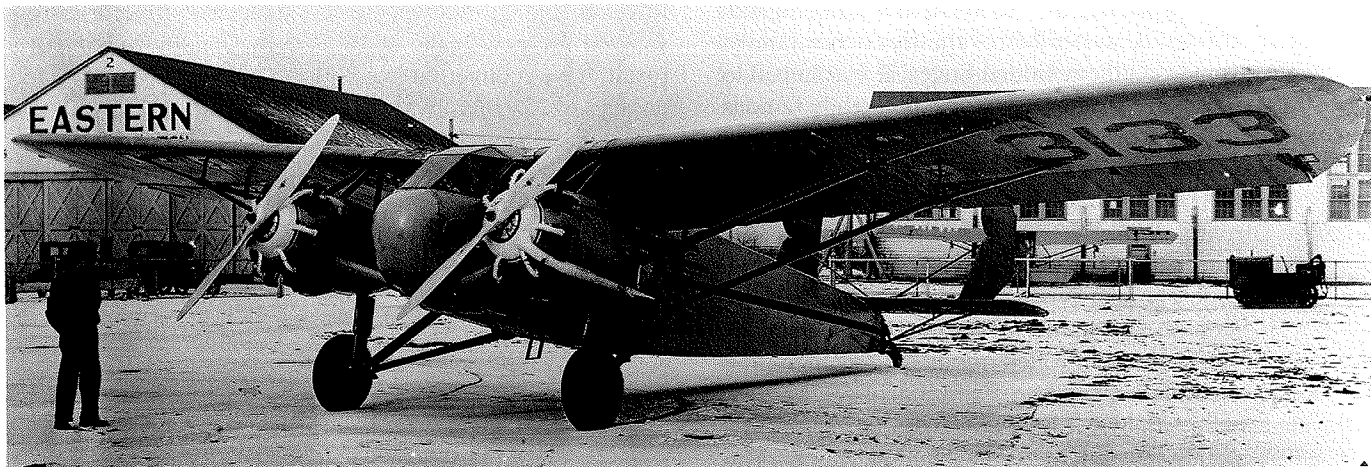
c/n G-2

Reg. no. NC 310N

Manufactured Oct. 3, 1929 at Garden City. Two Wright R-760 engines of 225 hp ea. (c/n's 12235, 12239). 7PCLM. Identification number issued to Curtiss Oct. 23, 1929. Converted to Model J-3 as of Feb. 10, 1930 under ATC Group 2-196. Identified number Feb. 19, 1930 with two Wright R-975 engines of 225 hp ea. Sold March 26, 1930 to Pan American Grace Airways, Inc., New York, NY. Export license no. 282 to Panagra to expire April 1, 1931 (Fleet no. P.11?). Based at Santiago, Chile, for trans-Andean flights to Argentina. [Eddie DeLarm, Panagra pilot in the 1930s, encountered the Kingbird flying the hump of the Andes. He notes: "They flew well, easy and (had) good visibility for landing in short fields—You look right over the nose at the runway."] Sold Jan. 24, 1931 to Curtiss-Wright Airplane Co., Robertson, MO. Returned to factory & Identified number issued to Curtiss-Wright "for improvements and re-conditioning." Letter, Nov., 1932, states: "dismantled."

The first Kingbird, r/n 3133, after conversion to a Model J with 225 hp Wright R-760 engines.

Photo: Editor's Collection





The third Kingbird, r/n 374N with revised tail.

Photo: Curtiss T-5375, Jan. 25, 1930 via Peter M. Bowers Collection

c/n G-3

Reg. no. 374N

Manufactured Dec. 20, 1929 by Curtiss at Garden City, NY with Wright R-760 engines of 225 hp each. Remodeled by Curtiss-Wright at Robertson, MO as of August 20, 1930, with changes in tail surfaces. Sold Sept. 5, 1930 to Consolidated Air Lines, Sacramento, CA. [Consolidated briefly (1930-31) flew a short airline from Sacramento to Alameda, CA.] Repossessed Feb. 5, 1931 & sold to A.M. Dinsmore, Oakland, CA. Repossessed Oct. 17, 1931 & sold to Curtiss-Wright Flying Service, NY City. Sold Oct. 17, 1931 to Salvatore Martino & Alice M. Crinage, Brooklyn, NY. Accident, Cairo, NY, July 17, 1932. Conditional sale Sept. 9, 1933 to Youngberg Aerial Advertising Corp., Brooklyn, NY. Repossessed Jan. 2, 1934 by Fannie Martino, Brooklyn, NY & Sold Mar. 13, 1934 to Roman F. Macaya, Brooklyn, NY & resold April 5, 1934 to Jack Holst, Port Simon, Costa Rica. [Macaya, a Costa Rican citizen, was starting an airline there, using Kingbirds. Holst was associated with Macaya & Aerovias Nacionales.] Engines overhauled and airplane re-covered by Erickson & Remmert, Floyd Bennett Field, prior to shipment to Costa Rica. Flown by Macaya and Aerovias Nacionales 1934-?. Costa Rican Registration CR-5, later TI-5 (?). Cancelled 1939.

Model D-1/D-2

c/n 2001

Reg. no. 385N

Manufactured July 10, 1930 by Curtiss-Robertson Airplane Manufacturing Co., Robertson, MO as 8PCLM with Wright R-760 engines of 240 hp each. ATC 347. Converted to Model D-2 under ATC 348, Sept. 29, 1930, with R-975 engines & steel engine nacelles. Sold to Curtiss-Wright Airplane Co., Robertson, MO Dec. 11, 1930. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold April 5, 1934 to Servicio Aereo Colombiano (SACO), Bogota, Colombia. Export Certificate no. E-1124 issued May 1, 1934. Colombian Reg. no. K-1. Disposition unknown.

c/n 2002

Reg. no. 586N

Manufactured Aug. 2, 1930 by Curtiss-Robertson Airplane Mfg. Co., Robertson, MO. Sold Dec. 11, 1930 to Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold April 5, 1934 to Servicio Aereo Colombiano (SACO), Bogota, Colombia. Export Certificate no. E-1125 issued April 30, 1934. Colombian Reg. no. K-2. Disposition unknown.

c/n 2003

Reg. no. 588N

Manufactured Sept. 12, 1930 by Curtiss-Robertson Airplane Mfg. Co., Robertson, MO. Sold Dec. 8, 1930 to Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold Dec. 31, 1934 to North American Aviation, Inc., NYC. Sold April 2, 1935 to Aerovias Nacionales, San Jose, Costa Rica. Export Certificate no. E-1412 issued April 17, 1935. Costa Rican Reg. no. TI-8. Cancelled, 1939.

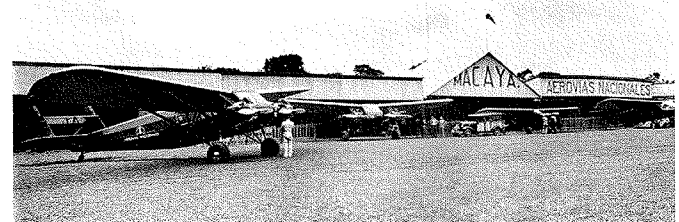


Aerovias Nacionales Kingbird with Costa Rican registration TI-8, ex-588N.

Photo: Ramon Macaya via Gary Kuhn

There are three Aerovias Nacionales Kingbirds in this photo.

Photo: Ramon Macaya via Gary Kuhn





Kingbird 589N with its large number 9 for the 1930 Ford Air Tour.

Photo: Editor's Collection

c/n 2004

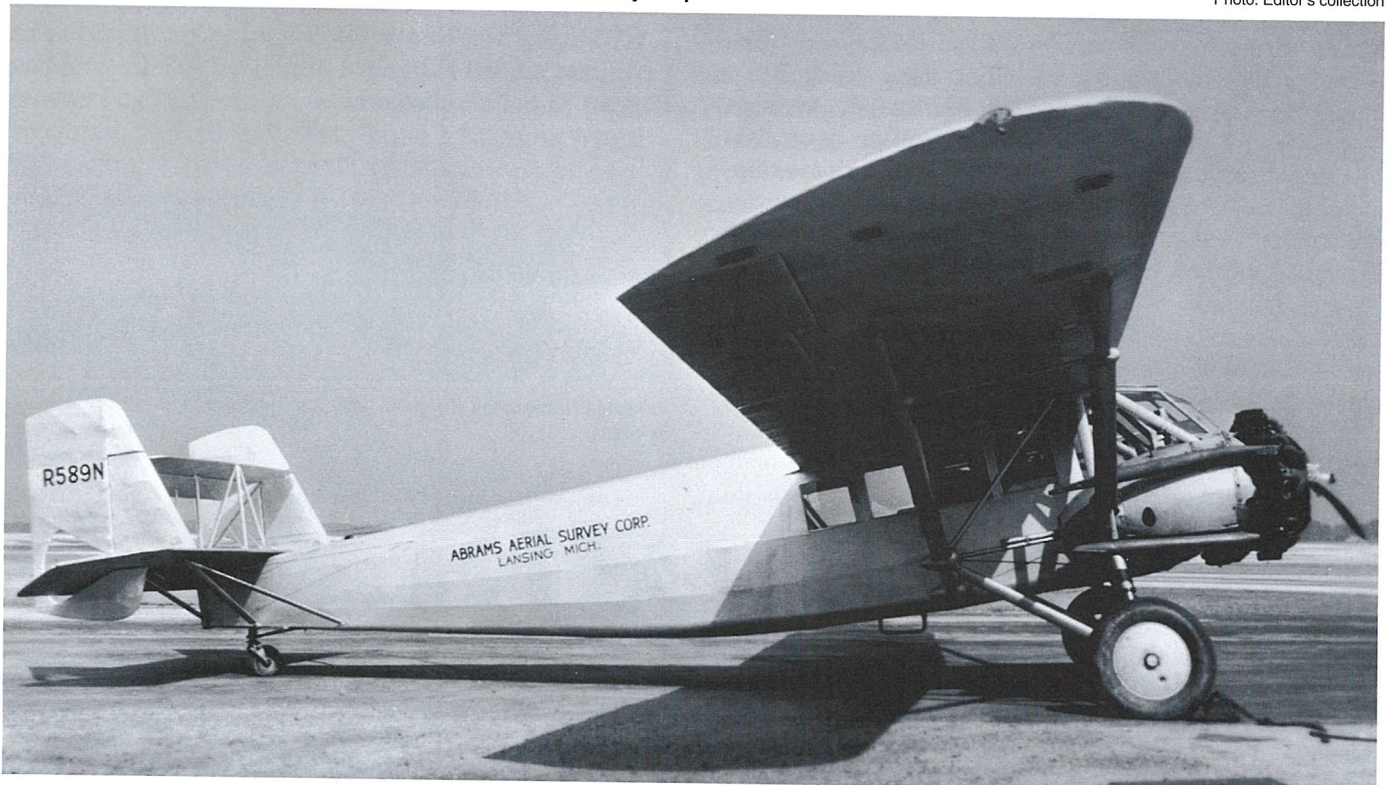
Reg. no. 589N

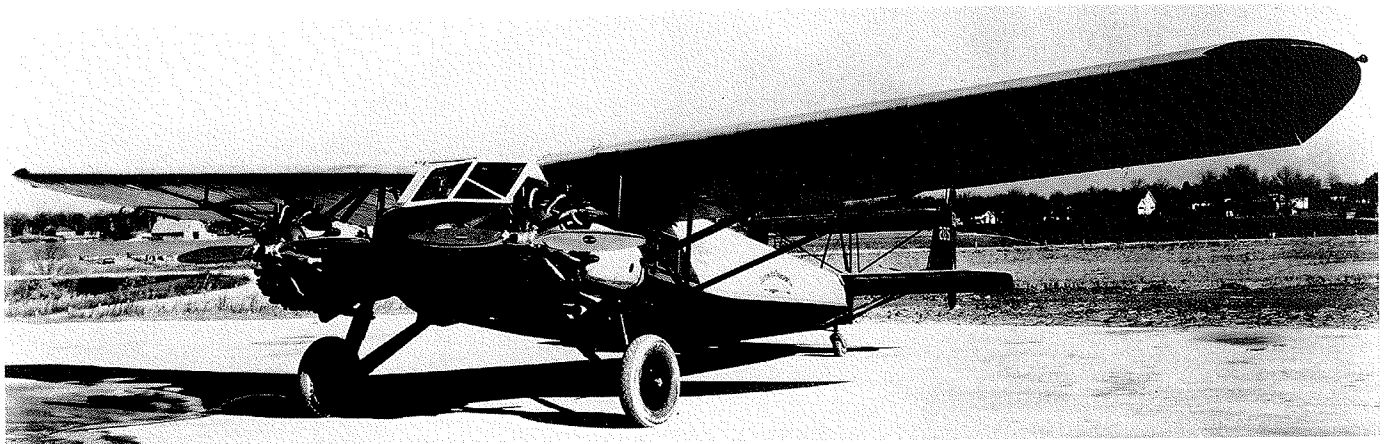
Manufactured Aug. 30, 1930 by Curtiss-Robertson Airplane Mfg. Co., Robertson, MO. This Kingbird, the fourth to be built at the Curtiss-Robertson factory in Robertson, MO, was flown by Walter H. Beech (Transport License no. 534) in the Ford Air Tour of 1930. His number was "9" and the Kingbird placed 6th in the tour. Beech was accompanied by Curtiss-Wright pilot/mechanic/salesman Owen G. Harned (Transport License no. 226), of Stillwater, OK. Other passengers (some part way) included mechanic Mel French, Robert Hutchinson, and Olive Ann Mellor (who became Mrs. Beech). Damage to fabric in a dive over Great Falls, MT, resulted in top fuselage repairs by Harned and

French using "sheet metal and baling wire." (One Kingbird demonstrator [this one?] participated in the 1930 National Air Races held at Chicago. Flown by Frank Kern in a race for multi-motored aircraft; it completed half of the ten-lap course.) Sold Dec. 10, 1930 to Curtiss-Wright Airplane Co., Robertson, MO. Sold March 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold Dec. 31, 1934 to North American Aviation, Inc., NYC. Sold July 12, 1935 to Abrams Aerial Survey Corp., Lansing, MI. In 1936 used in Puerto Rico on aerial surveys. Licensed "NR" 1935 to expiration, Aug. 1, 1938. Unairworthy & tied down at Brooks Field, Marshall, MI, 1938-42. Accident, Mar. 16, 1942. Tornado blew Piper Cub into right wing and aileron of Kingbird. No further info.

Kingbird R589N when it was owned by the Abrams Aerial Survey Corp.

Photo: Editor's collection





Kingbird 599N of Eastern Air Transport.

Photo: Editor's Collection

c/n 2005 Reg. no. 599N

Manufactured Nov. 3, 1930 by Curtiss-Robertson Airplane Mfg. Co., Robertson, MO. Sold Dec. 10, 1930 to Curtiss-Wright Airplane Co., Robertson, MO. Rebuilt Dec. 6, 1930 as mail/passenger type with increased gr. wt. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Accident, Atlanta, GA, Sept. 5, 1931. Washed out, License cancelled.

Transport, Inc., Brooklyn, NY. Sold Dec. 31, 1934. Accident Mar. 13, 1931, Ellenville, GA. Accident July 11, 1932, Greensboro, NC. Sold Dec. 31, 1934 to North American Aviation, NYC. As of Mar. 2, 1936 plane had been "sold for junk." Mar. 2, 1936 Ltr from N.A.A. states "No more Kingbirds are left, either in operation or as surplus equipment."

c/n 2006 Reg. no. 600V

Manufactured Dec. 7, 1930 by Curtiss-Wright Airplane Co., Robertson, MO. 6360 lb gr. wt. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold April 5, 1934 to Servicio Aereo Colombiano (SACO), Bogota, Colombia. Export Certificate E-1136 issued April 18, 1934. Colombian Reg. no. K-3. Disposition unknown.

c/n 2010 Reg. no. 621V

Manufactured Dec. 31, 1930 by Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold July 27, 1934 to F.W. Kingsley, Glendale, CA and Bluefields, Nicaragua. Nicaraguan Reg. no. AN-(?), later Aerovias Nacionales. Costa Rica Reg. no. TI-16? To TACA, Reg. cancelled 1940.

c/n 2007 Reg. no. 601V

Manufactured Dec. 17, 1930 by Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 13, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold 1932 to Curtiss-Wright Export Corp., NYC. Leased to Ministry of National Defense, Istanbul, Turkey, with 6-mos. option to buy. Export Cert. E-606 issued Oct. 7, 1932.

c/n 2011 Reg. no. 622V

Manufactured Jan. 7, 1931 by Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Accident May 7, 1933, Jacksonville, FL. Sold June 4, 1934 to James H. Drummond, Poughquag, NY. Sold June 15, 1936 to John F. Balog, Port Chester, NY. Sold June 23, 1936 to Aero Engineering & Advisory Service, Inc. (Saul I. Radin), NYC. Sold Apr. 19, 1938 to E. Lepicier, Poughquag, NY. Sold Nov. 23, 1938 to S.S. Pike Company, Inc., NYC. Sold Dec. 30, 1938 to Lawrence J. Sohler, Portland, OR. Sold May 23, 1940 to Sohler Flying Service, Inc., Portland, OR. Sold July 24, 1942 to Lawrence J. Sohler, Portland, OR. Sold July 8, 1943 to Alaska Coastal Airlines, Juneau, AK. Accident Feb. 1, 1952, Tulesquah, B.C. "Salvaged for parts."

c/n 2008 Reg. no. 602V

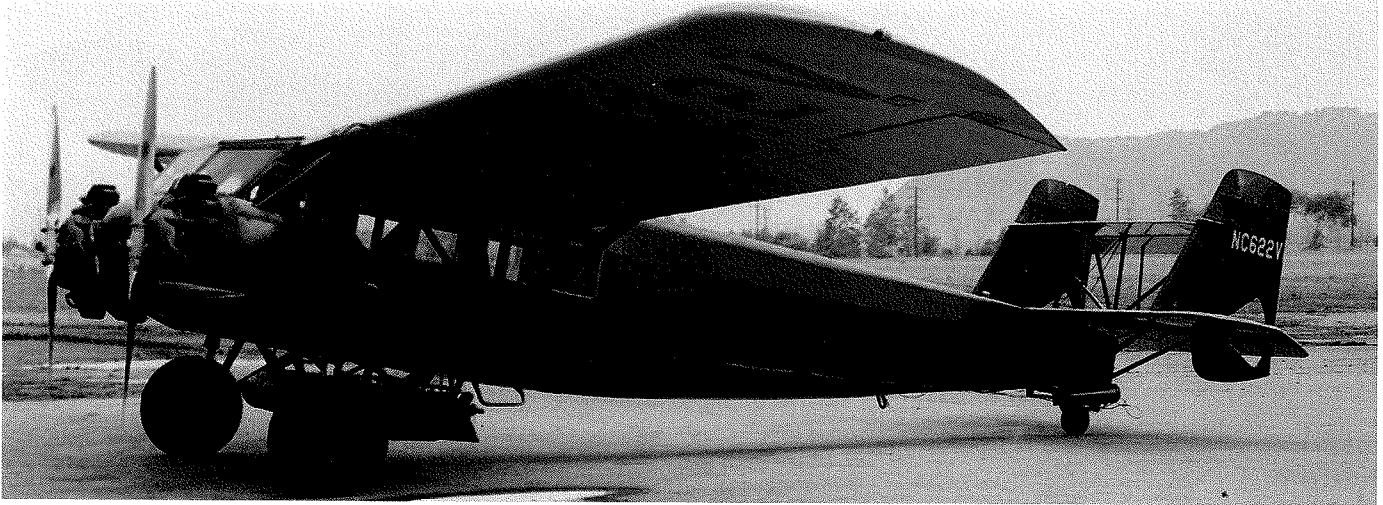
Manufactured Dec. 22, 1930 by Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold 1932 to Curtiss-Wright Export Corp., NYC. Leased to Ministry of National Defense, Istanbul, Turkey, with 6-mos. option to buy. Export Cert. E-607 issued Oct. 7, 1932. [Two Kingbirds to Turkey to inaugurate airline service, Istanbul-Ankara. In 1933 this became Devlet Hava Yollari (DHY), later the Turkish State Airline: Turk Hava Yollari (THY).]

c/n 2012 Reg. no. 626V

Manufactured Jan. 14, 1931 by Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 19, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Price: \$20,000. Sold Dec. 31, 1934 to North American Aviation, Inc., NYC. License not renewed, cancelled Mar. 1, 1935. Probably scrapped.

c/n 2009 Reg. no. 620V

Manufactured Dec. 26, 1930 by Curtiss-Wright Airplane Co., Robertson, MO. Sold Mar. 19, 1931 to Eastern Air

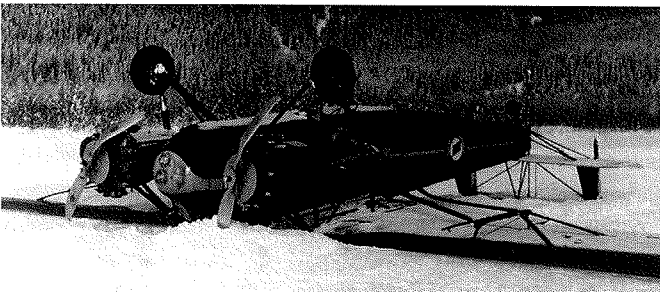


Kingbird NC622V with an unusual external pod under the cabin. Note the additional upper horizontal stabilizer.

Photo: Peter M. Bowers Collection

Alaska Coastal Airlines' Kingbird 622V on its back after an accident at Tulesquah, B.C. on Feb. 1, 1952.

Photo: Peter M. Bowers Collection



c/n 2013

USN Bu. No. 8846

Plans by Curtiss at Garden City (with Ken Perkins as project engineer) for a troop/transport and ambulance aircraft for use of the U.S. Marine Corps resulted in the manufacture of this airplane in 1931 by Curtiss-Wright Airplane Co. of Robertson, MO. It had been ordered by the U.S. Navy under contract no. 19841 as a JC-1 (Utility) aircraft. With two Wright R-975E engines (c/n's 14684 & 14685) it was flown from the factory to Anacostia Naval Air

Station, Washington, D.C., on March 4-5, 1931. Acceptance by the Navy followed on April 15. Two days later the new Kingbird was ferried to the Marine Corps base at Quantico, Va., designated an "RC-1."

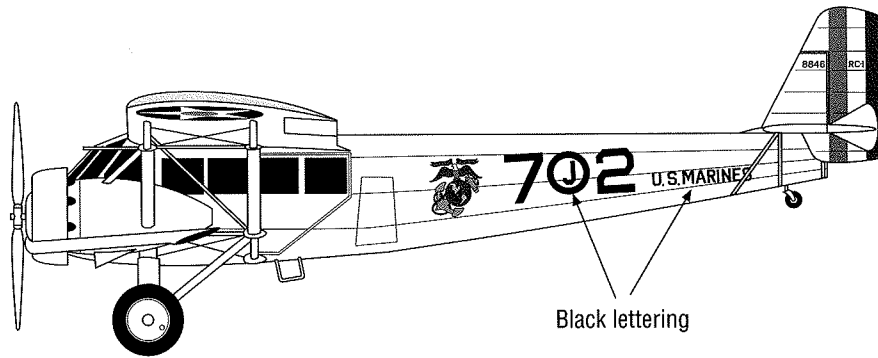
Used by the Corps for both ambulance service and utility transport, Bureau Number 8846 was stationed at Quantico from April 17, 1931 to July 19, 1933. During this time, the airplane had a punctured oil tank, broken anti-drag wire fittings inside the left wing, and a cracked control column, all of which were repaired. Further repair was given the tail section (June 17, 1933) and the landing gear (Sept. 18, 1933). That summer, the RC-1 was transferred to California as part of the Marine Corps' "West Coast Expeditionary Force" and was based at San Diego. Minor overhauls were performed in 1935.

As of April 22, 1936, the one-and-only Navy/Marine RC-1 was at the San Diego NAS, equipped with Wright engines (c/n's 14626 & 14629). It was reported to have "badly deteriorated motor mounts of laminated wood." Orders were issued to overhaul the engines and "strike" the airplane. It was duly stricken from the Navy list on Oct. 31, 1936 with a total flying time of 1249.4 hours.

The only military Kingbird, USMC RC-1 8846 at NRAB Long Beach, CA.

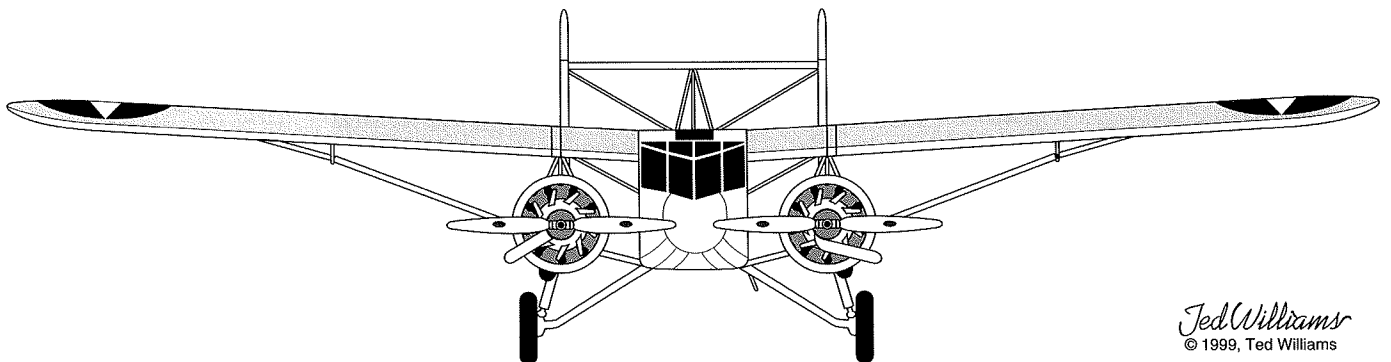
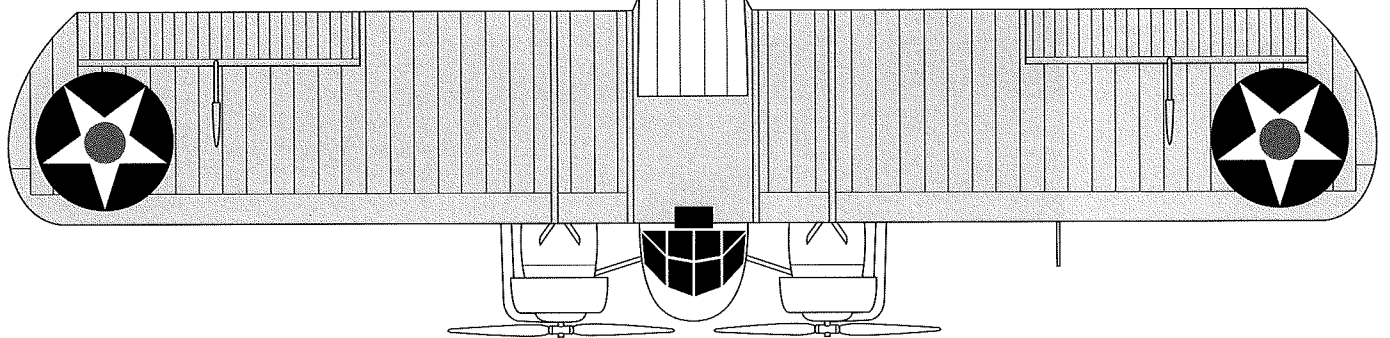
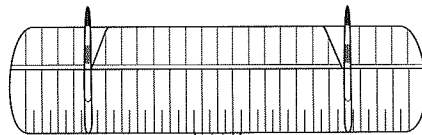
Photo: William T. Larkins



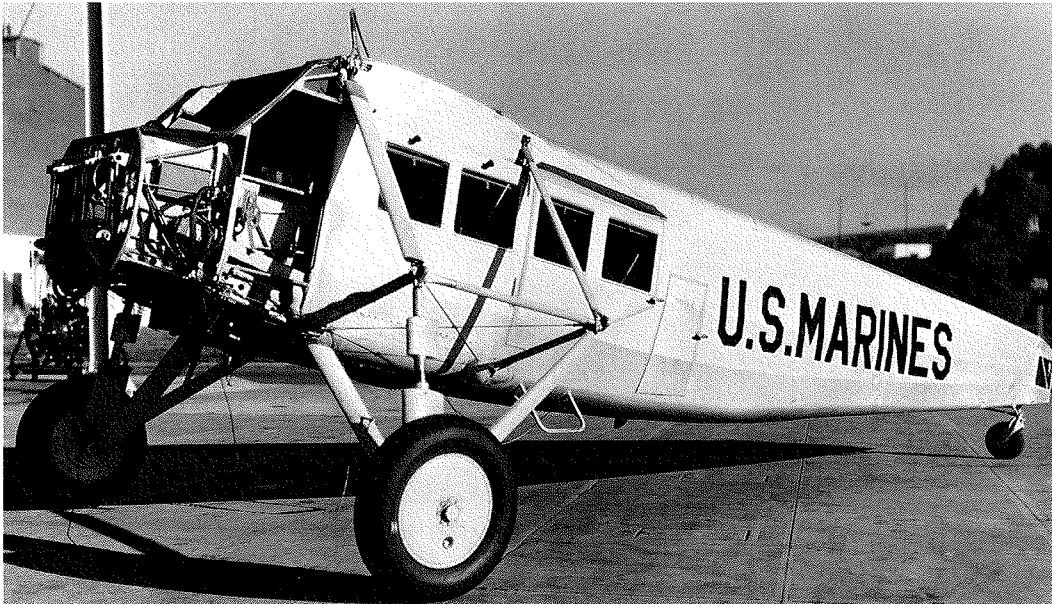


Colors:
Overall aluminum, yellow upper wing surface, red/white/blue rudder stripes and national insignias.

Curtiss-Wright RC-1 Kingbird



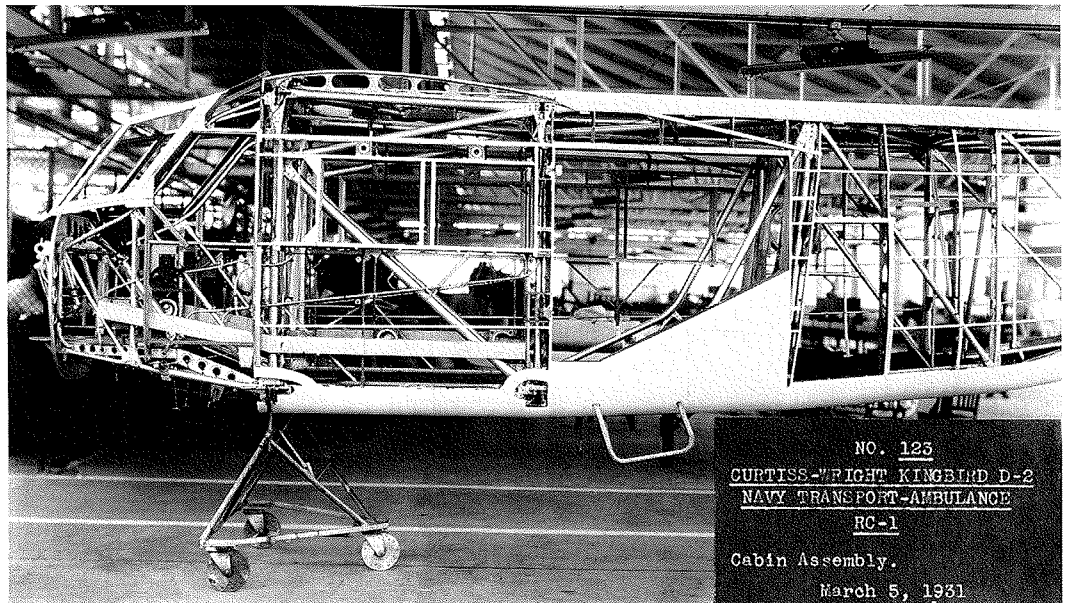
Jed Williams
© 1999, Ted Williams



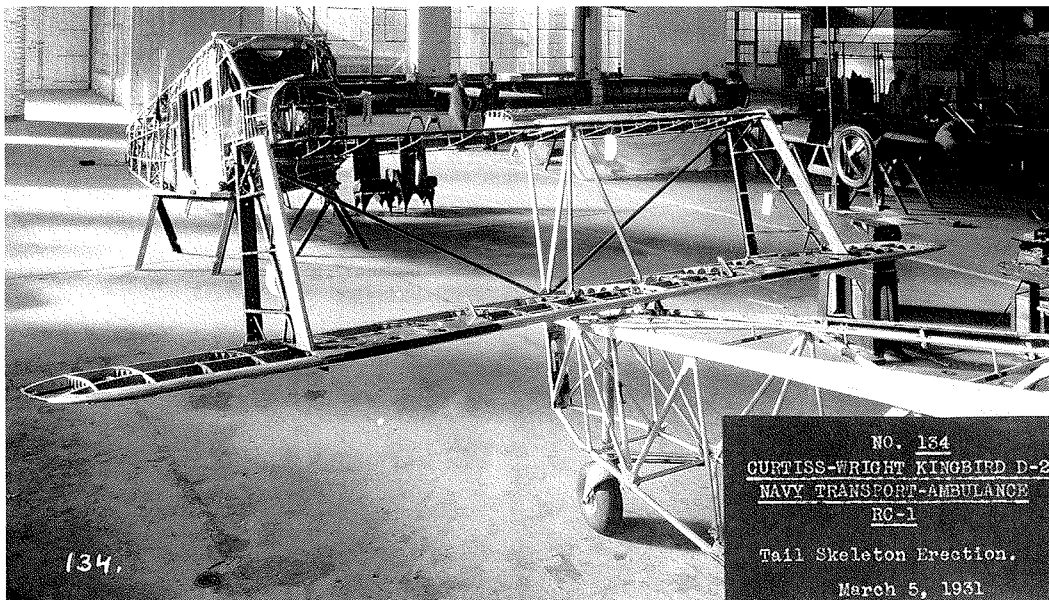
USMC Kingbird RC-1 8846.
Photo: Editor's Collection

The RC-1 fuselage under construction. The date on this and other construction photos seems to conflict with other records which indicate that the RC-1 was flown from the factory to Anacostia NAS on March 4-5, 1931.

Photo: C-W Robertson
No. 123, NARA RG 38AC,
editor's collection



NO. 123
CURTISS-WRIGHT KINGBIRD D-2
NAVY TRANSPORT-AMBULANCE
RC-1
Cabin Assembly.
March 5, 1931



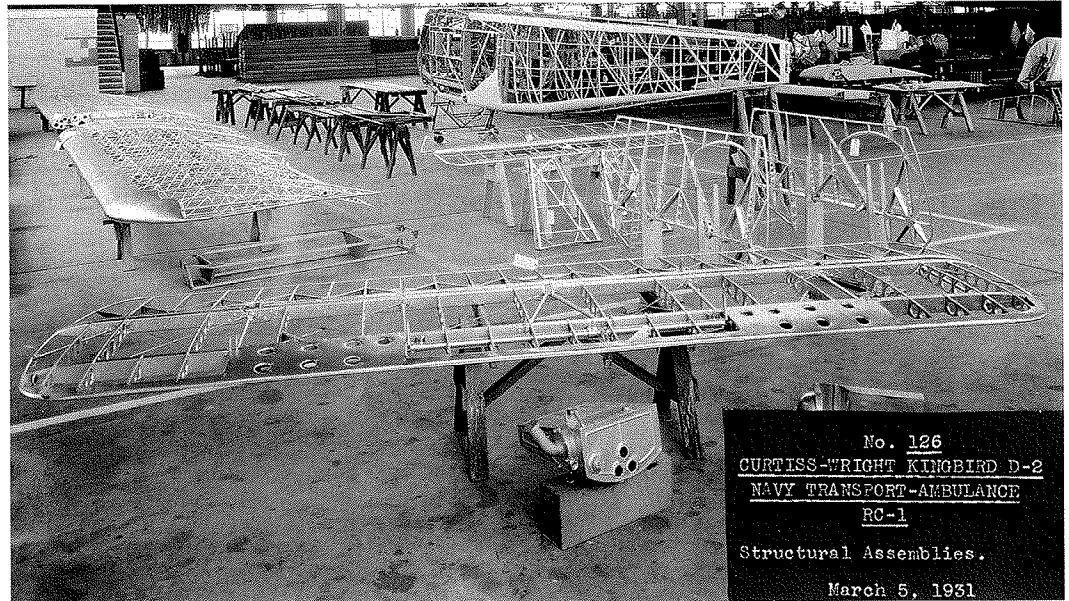
The empennage of the RC-1 under construction.

Photo: C-W Robertson
No. 134, NARA RG 38AC,
editor's collection

NO. 134
CURTISS-WRIGHT KINGBIRD D-2
NAVY TRANSPORT-AMBULANCE
RC-1
Tail Skeleton Erection.
March 5, 1931

The RC-1's wings, empenage, and fuselage during construction.

Photo: C-W Robertson
No. 126, NARA RG 38AC,
editor's collection



Besides a pilot and copilot, the RC-1 could carry two litter patients and two attendants.

Photo: C-W Robertson
No. 130, NARA RG 38AC,
editor's collection

Demonstrating the loading of a litter patient on the RC-1.

Photo: C-W Robertson
No. 132, NARA RG 38AC,
editor's collection





Demonstrating how the RC-1 could carry two litter patients. One of two attendant's seats is visible near the cabin entrance door.

Photo: C-W Robertson
No. 133, NARA RG 38AC,
editor's collection

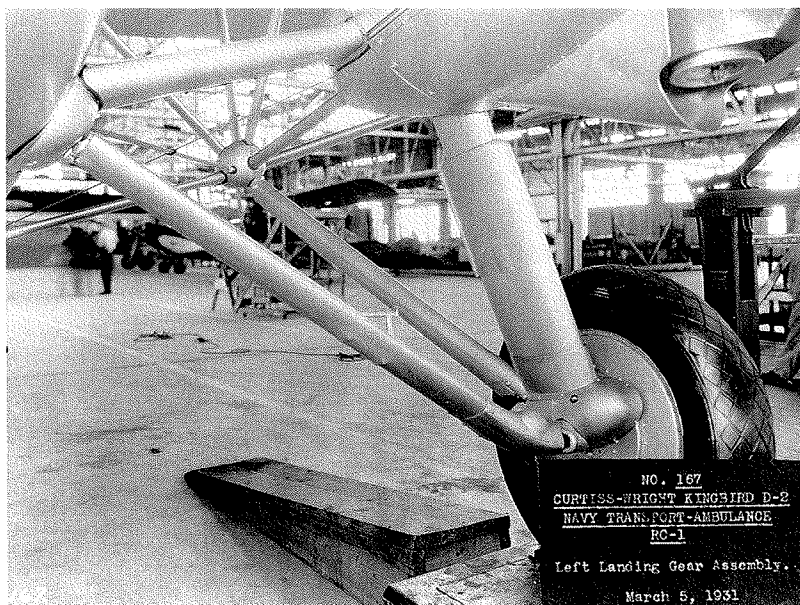
NO. 133
CURTISS-WRIGHT KINGBIRD D-2
NAVY TRANSPORT-AMBULANCE
RC-1
Litter Arrangement.
March 5, 1931

The cockpit of the RC-1. Note the differences in the instrument panel arrangement compared to the civilian version shown in Skyways No. 32.

Photo: C-W Robertson
No. 129, NARA RG 38AC,
editor's collection



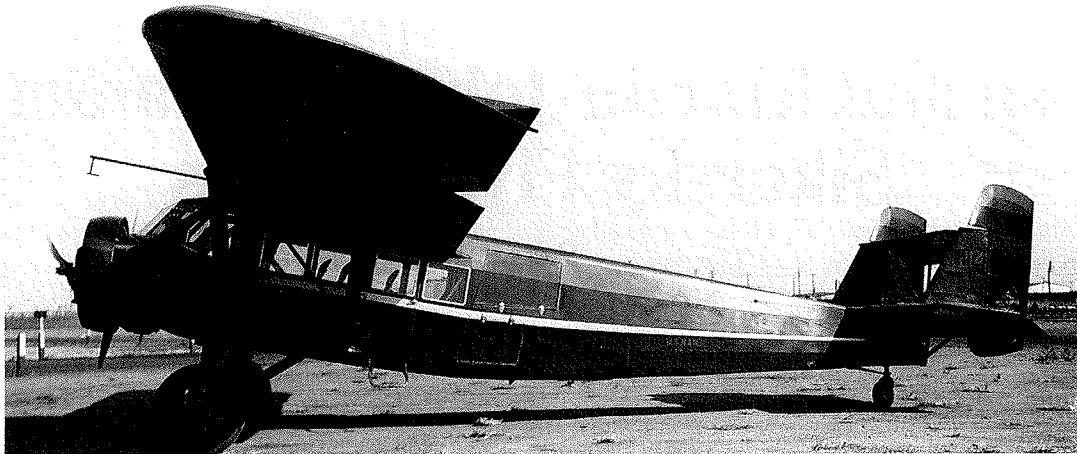
NO. 129
CURTISS-WRIGHT KINGBIRD D-2
NAVY TRANSPORT-AMBULANCE
RC-1
Controls Compartment.
March 5, 1931



The RC-1's landing gear.

Photo: C-W Robertson
No. 167, NARA RG 38AC,
editor's collection

NO. 167
CURTISS-WRIGHT KINGBIRD D-2
NAVY TRANSPORT-AMBULANCE
RC-1
Left Landing Gear Assembly.
March 5, 1931



Kingbird NC628V operated by Eastern Air Transport, Inc. (Air Mail AM-19).

Photo: Peter M. Bowers Collection

c/n 2014

Reg. no. 628V

Manufactured Jan. 31, 1931 by Curtiss-Wright Airplane Co., Robertson, MO. Sold April 13, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. Sold Nov. 23, 1934 to Howard B. Crawford, San Jose, Costa Rica. Export Cert. E-1285 issued Nov. 20, 1934. Flown by Aerovias Nacionales, San Jose. Costa Rican Reg. no. CR-6, TI-6. Sold 1939 to TACA? License cancelled 1940.

Note: Roman F. Macaya, operator of Aerovias Nacionales, was a Costa Rican citizen & obtained U.S. aircraft for his airline thru American associates. Another of his Kingbirds, Costa Rican Reg. # TI-25 (c/n unk.), went to Transportes Aereos Centros Americanos (TACA) when Macaya sold out in 1939. Reg. TI-25 was cancelled in 1940.

c/n 2015

Reg. no. 629V

Manufactured Jan. 14, 1931 by Curtiss-Wright Airplane Co., Robertson, MO. Sold April 16, 1931 to Eastern Air Transport, Inc., Brooklyn, NY. License expired and cancelled April 1, 1934. Airplane probably scrapped.

Model D-3

c/n 2016

Reg. no. 11816

Manufactured July 30, 1931 by Curtiss-Wright Airplane Co., Robertson, MO. Sold Oct. 21, 1932 to Curtiss-Wright Air Terminals, Inc., Jackson Heights, NY. Sold June 19, 1936 to The Kingbird, Inc., New York, NY. Sold Dec. 29, 1939 to Charles H. Babb, Glendale, CA. Sold June 8, 1940 to White Pass Airways, Skagway, AK. Sold Aug. 28, 1941 to British Yukon Navigation Co., Ltd., White Horse, Y.T. & Vancouver, B.C. Canadian registration CF-BVG. (Canadian Cert. no. 2917). To Yukon Southern Air Transport, Edmonton, Alberta, Canada, Cert. no. 2972, August 7, 1942. To Canadian Pacific Air Lines, Montreal, Que., Cert. no. 3033, Nov. 27, 1943. Sold Sept. 15, 1944 to Charles H. Babb Co., Glendale, CA. (Price: \$2250.) Re-assigned U.S. Reg. 11816. Sold Sept. 22,

1944 to Fairchild Aerial Surveys, Inc., Los Angeles, CA. No application for license from Fairchild, and license cancelled July 6, 1948.

It appears that, to the best of our knowledge, there are no existing Curtiss Kingbird aircraft in the world, today. For a cockpit analysis of the Kingbird by *Skyways* cockpits editor, Roy Meyers, see *Skyways* No. 32, Oct. 1994.

Heartfelt thanks for input is extended to: Vincent J. Berinati, John C. Barbery, Peter M. Bowers, R. E. G. Davies, J. R. Ellis, Lesley Forden (dec.), Dan Hagedorn, Joseph P. Juptner, Gary Kuhn, William T. Larkins, and John Underwood.

Curtiss Kingbird Specifications

[Reports and accounts vary, as does Curtiss advertising!]

Seating	7 passengers, 1 pilot
Length	34 ft 9 in
Height	10 ft
Wingspan	54 ft 6 in
Wing Area	405 sq ft
Wing Chord	100 in
Airfoil	Curtiss C-72
Empty Wt.	3754/3887 lb
Gross Wt.	5870/6115 lb
Ceiling	12,000/16,000 ft
Range	415/450 miles
Cruising Speed	110/115 mph
Max. Speed	228 mph

About the Author

The byline of Richard Sanders Allen should be familiar to readers of these pages. "Rick" is a researcher/writer, retired from the "history business" of the State of New York.

He writes about old roads and bridges, iron works, art and ethics controversies, and the Spanish Civil War. His greatest enjoyment, however, comes from the discovery and sharing of forgotten information about old airplanes. This is his eleventh article to appear in *Skyways*.