A.T.C. #223
(9-6-29)
KREUTZER "AIR COACH", K-5

Fig. 74. Kreutzer "Air Coach" model K-5 with 3 Kinner K5 engines.

The trim "Air Coach" model K-5 was the latest development in the Kreutzer light tri-motor design, an arrangement calculated to assure reliability of operation in an airplane especially designed for the smaller air-lines operating over rugged and desolate country, or the business man to whom would appeal the extra comfort and assurance of multi-engined flying. To sell the utility of air travel, manufacturers were deemed to stress safety and reliability of operation above all else; the assurance of reasonable safety and reliability would certainly be most appealing to those interested in air-travel, but who were yet largely concerned with the occasional chance of engine failure. The easiest way to insure the sense of safety and reliable operation in an airplane was the multi-engined configuration; multiple engines provided that sense of comfort and assurance to know that power was still available for continued flight, even in the case of failure to one engine. Large "twins" and "tri-motors" had been used extensively on air-lines for several years, now the trend was swinging towards the light multi-engined airplane. The Kreutzer "Air Coach", first introduced to the public in 1928, was among the first offered in this new concept. Offered in 2 different models during the earlier part of 1929 (refer to chapters for ATC # 170-171 in U.S. CIVIL AIRCRAFT, Vol. 2), the latest offering was exemplified in the model K-5 which was now more plush with somewhat higher performance.

The good-looking Kreutzer "Air Coach" model K-5 was a "baby tri-motor" high wing monoplane that was powered with 3 five cyl. Kinner K5 engines of 100 h.p. each. There was ample room and good comfort for six in a spacious and well appointed cabin, offering heat and ventilation, the safety of shatter-proof glass, with a promise for an extra margin of safety and performance provided by the three 100 h.p. engines. In comparison to previous models of the "Air Coach", the model K-5 now had a total of 300 h.p., which was a reserve of power that translated into higher performance, with ample power still

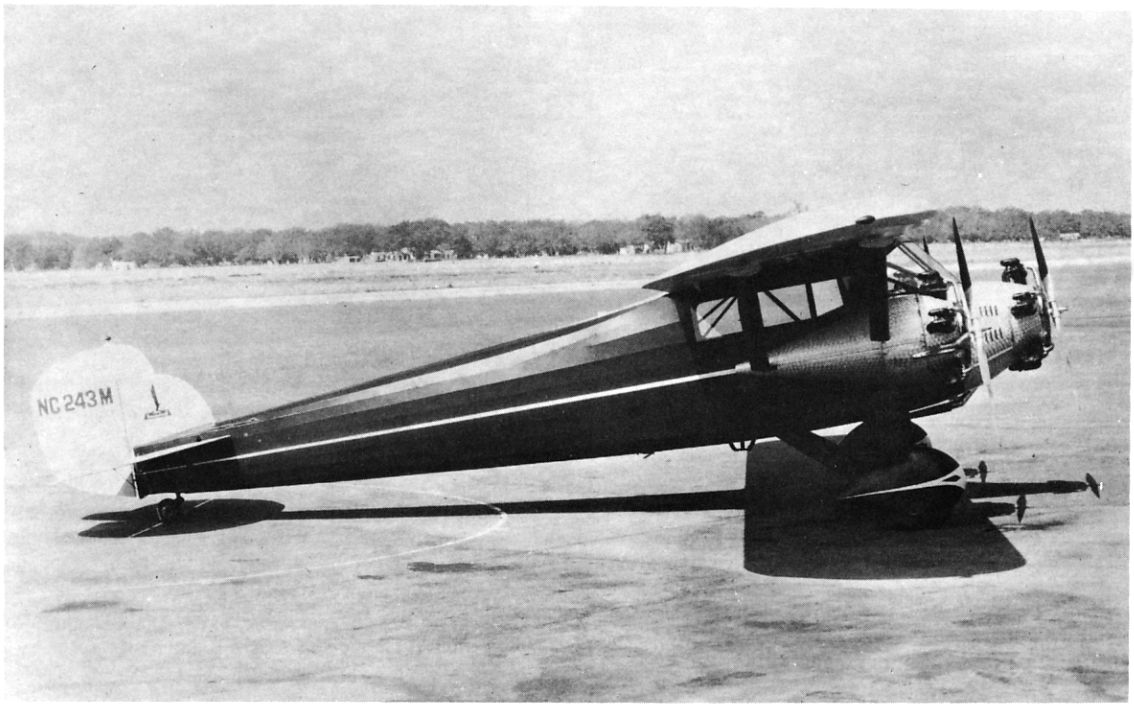

Fig. 75. Kreutzer "Air Coach" K-5 revived later as air transport T-6.

available for continued flight to a haven of refuge in the case of failure to any one engine. Well suited for feeder-line service over rough and desolate country, the K-5 "Air Coach" was used by lines in Arizona and Louisiana, which both abounded in treacherous terrain where an extra margin of safety, or even implied safety, would surely be appreciated by those on board. Business men found this new version very attractive and several were used in business promotion; the Kinner Engine Co. operated a Kreutzer K-5 in demonstration tests around the country. The type certificate number for the Kreutzer model K-5, as powered with three 100 h.p. Kinner K-5 engines was issued 9-6-29 and some 8 or more examples of this model were manufactured by the Joseph Kreutzer Corp. (Aircraft Division) of Los Angeles, Calif. In a slight re-organization of the company about this time, Joseph Kreutzer became chairman of the board; Howard Throckmorton was the president and treasurer; Albin K. Peterson was V.P. and chief of design and engineering.

The Kreutzer "Air Coach" series were designed by Albin K. Peterson who was well-noted in the California aircraft industry circles for some outstanding designs. In the early thirties, after the Kreutzer Co. suspended production on the "Air Coach" series, Peterson designed the light "Meteor" sport monoplane which was an interesting craft, but failed to attract any substantial business because of the economical depression that still held sway in this country. In 1935, the Air Transport Mfg. Co. of Glendale, Calif. was organized with A. K. Peterson as V.P. and chief engineer, to revive the production of the Kreutzer K-5 (changed to model T-6) and the "Meteor" monoplane, but the new venture was not successful.

Listed below are specifications and performance data for the Kreutzer "Air Coach" model K-5 as powered with three 100 h.p. Kinner K5 engines; length overall 33'6"; hite overall 9'6"; wing span 48'10"; wing chord 84"; total wing area 315 sq.ft.; airfoil Goettingen 398; wt. empty 2745; useful load 1698; payload with 85 gal. fuel was 951 lbs.; gross wt. 4443 lbs.; max. speed 130; cruising speed 110; landing speed 45; climb 950 ft. first min. at sea level; ceiling 17,000 ft.; gas cap. 85 gal.; oil cap. 9 gal.; cruising range at 18 gal. per hour was 520 miles; price at the factory was approx. $18,500. The following figures are for later version as designated model T-6; wt. empty 2828; useful load 1672; payload with 85 gal. fuel was 925 lbs.; gross wt. 4500 lbs.; due to careful streamlining and the use

of "wheel pants" (wheel fairings), the max. speed was raised to near 140 m.p.h.; other figures remained more or less the same.

The fuselage framework was built up of welded chrome-moly steel tubing in truss form, faired to an oval cross-section with duralumin formers and fairing strips, then fabric covered. The cabin area was spacious and well appointed with provisions for cabin heat and ventilation; the cabin walls were sound-proofed and insulated with "Seapak". The cabin was fitted with two large entrance doors, shatter-proof glass, and dual wheel controls were provided; the large baggage compartment was to the rear of the cabin section, with provisions for a small lavatory and locker. The semi-cantilever wing framework, in two halves, was built up of spruce and plywood box-type spar beams with spruce and plywood truss-type wing ribs; the leading edge was covered with plywood and the completed framework was covered with fabric. The fuel supply was carried in 2 gravity-feed tanks mounted in the root end of each wing half; an oil tank of 3 gal. capacity was mounted in each engine nacelle. The landing gear of 162 inch tread was of the outrigger type using "Aerol" shock absorbing struts; wheels were 32x6 and Bendix brakes were standard equipment. A full swivel tail-wheel was a great help in ground maneuvering. The fabric covered tail-group was built up of welded chrome-moly steel tubing; the fin was ground adjustable and the horizontal stabilizer was adjustable in flight. Navigation lights, metal propellers, fire extinguishers, first-aid kit, storage battery, and engine starters were also standard equipment. The Air Transport model T-6 version was quite typical but offered 9.50x12 semi-balloon tires with wheel fairings, and electric Eclipse engine starters. The next approved development designed by A. K. Peterson, was the "Meteor" P-2 which will be discussed in the chapters for ATC # 482 and # 488.

Listed below are Kreutzer model K-5 entries that were gleaned from registration records:

NC-9354;	Model	K-5	(# 104)	3 Kinner K5.
NC-983H;	„	„	(# 107)	„
NC-982H;	„	„	(# 108)	„
NC-243M;	„	„	(# 110)	„
NC-244M;	„	„	(# 111)	„
;	„	„	(# 112)	„
NC-187W;	„	„	(# 113)	„
NC-995Y;	„	„	(# 114)	„

Serial # 104 was first a model K-3 with 3 LeBlond 90; registration number for serial # 107 unverified; registration number for serial # 112 unknown; serial # 113 operated in Central America; serial # 114 later modified by Air Transport Mfg. Co. to model T-6.