## A.T.C. # 420 (4-23-31) STINSON TRI-MOTOR, SM-6000-B



Fig. 64. Stinson SM-6000-B with three 215 h.p. Lycoming engines; also known as "Model T."

Comparatively low-priced and quite economical for the amount of work it could perform, the Stinson tri-motored "Model T" (SM-6000-B) found ready favor with new and expanding airline systems across the country. Century Airlines was, of course, equipped with the new transport, so was the Century-Pacific line, and later they were put into service by the N.Y.-Philadelphia & Washington Line, the Pennsylvania Air Lines, the American Airways, Transamerican, Chicago & Southern, Eastern Air Transport, and Delta Air Lines; one tri-motored SM-6000-B even got over to the Philippine Islands for air line service there. Century Airlines as organized by E. L. Cord, used the SM-6000-B on the route from Cleveland to St. Louis, with stops at Toledo, Detroit, and Chicago. The Century-Pacific line, also an E. L. Cord venture, served a route from San Diego to San Francisco for a short time. Early in 1932 the Century and Century-Pacific lines, through some corporate manipulations, were absorbed into the workings of the American Airways system; thus "American" inherited some 24 tri-motored SM-6000-B and 3 Stinson "Junior" in the deal. Stately, confidence-inspiring, hardy, and very dependable, the SM-6000-B served the various airlines faithfully for several years; when retired from regular service most were relegated to further service on lesser lines, or to "barnstorm" the countryside in the mid-thirties. These barnstorming

tours, very much like those of the gipsy-fliers in the decade previous, were a haphazard living at best but the cheap joy-rides brought many people their first airplane ride, winning over many new converts to air-travel. Excellent performance, inherent safety, and a compatible nature helped to promote the popularity and the longevity of the SM-6000-B, so we find that at least 25 examples were still flying actively in 1939, and some even for years afterwards.

The Stinson tri-motored model SM-6000-B (Model T) was a large high-winged cabin monoplane of the transport type with various seating arrangements for 6 to 10 passengers. The model SM-6000-B1 was the all-passenger version seating 10 passengers and a pilot; arranged with coach-style interiors, this version allowed just short of 25 lbs. of baggage per person. The model SM-6000-B2 as the mail-passenger version was the more popular, with arrangements for 8 or 9 passengers and bins for up to 350 lbs. of mail and baggage. Extensively upgraded from the earlier SM-6000 "Airliner", the SM-6000-B now had provisions for extra equipment, more pilot aids, more comfort for the passengers, including washroom and lavatory, and other progressive modifications that added to its usefulness in airline service. With all passenger seating removed, the SM-6000-B was also eligible as a cargo-carrier. For the business man, special "Club" interiors were available to seat from 6 to

## U.S. CIVIL AIRCRAFT



 $Fig.\,65.\,SM-6000\cdot B\ served\ Clevel and \cdot Pittsburgh\cdot Washington\ route\ for\ Pennsylvania\ Air\ Lines.$ 

8 passengers in varying degrees of deluxe comfort, for just traveling in style or for conducting business enroute. As powered with three 9 cyl. Lycoming R-680 engines of 215 h.p. each, the SM-6000-B delivered a performance that certainly belied its well-apparent bulk. With a low-drag speed-ring cowling shrouding each of its engines, and large streamlined fairings over the big wheels, this craft could maintain a top speed of 146 m.p.h. With a fair amount of power reserve, the tri-motored SM-6000-B could maintain an altitude of 6000 ft. with any two of its engines, even when fully loaded. A take-off run of about 700 ft. and a landing run of about 400 ft.

was not particularly essential for airline work, but it was particularly appreciated later on by pilots barnstorming out of small turf-covered fields. Typical of all Stinson monoplanes, the big SM-6000-B cooperated with the pilot to perform an admirable job, no matter what the chore. Many pilots to this day have a soft spot in their hearts for the big, good-natured SM-6000-B. The type certificate number for the tri-motored SM-6000-B was issued 4-23-31 and at least 40 examples of this model were manufactured by the Stinson Aircraft Corp. at Wayne, Mich.

Listed below are specifications and performance data for the Stinson model SM-6000-B



Fig. 66. Transamerican crew prepare to move Stinson Tinto hangar for service.



Fig. 67. SM-6000-B retired from airline service shown here during barnstorming tour through Indiana in mid-1930.

as powered with 3 Lycoming R-680 engines of 215 h.p. each; length overall 42'10"; height overall 12'0"; wing span 60'0"; wing chord 105"; total wing area 490 sq.ft.; airfoil Goettingen 398; (following wts. apply specifically to SM-6000-B1); wt. empty 5670 lbs.; useful load 2930 lbs.; payload with 160 gal. fuel 1680 lbs.; payload with 110 gal. fuel 1980 lbs. (10 pass. at 170 lb. each & 280 lb. baggage); gross wt. 8600 lbs.; max. speed 138; cruising speed 115 (2 engines cowled, no wheel pants); max. speed 146; cruising speed 122 (3 engines cowled and wheel pants); landing speed 60-65; climb 1000 ft. first min. at sea level; climb to 10,000

ft. in 30 min.; ceiling 14,500 ft.; gas cap. max. 160 gal.; oil cap. 15 gal.; cruising range at 35 gal. per hour 350 miles; price \$25,900. at factory in 1931, lowered to \$19,500. early in 1932; (the following wts. apply specifically to SM-6000-B2); wt. empty 5758 lbs.; useful load 2842 lbs.; payload with 110 gal. fuel 1892 lbs. (9 pass. at 170 lb. each & 362 lbs. mailbaggage); gross wt. 8600 lbs.; above listed performance figures apply to SM-6000-B2 also. Gross wt. allowance later boosted to 8800 lbs. with approved modifications.

The fuselage framework was built up of welded chrome-moly (4130) steel tubing,



 $Fig.\,68.\,SM-6000-B\ as\ deluxe\ club-plane\ offered\ plush\ appointments\ and\ special\ conveniences.$ 



Fig. 69. SM-6000-B retired from airlines were popular for charter flights.

faired to shape with formers and fairing strips, then fabric covered; the whole forward section to a point just behind the pilot station was covered in removable duralumin metal panels. The pilot's compartment had optional seating for 1 or 2 pilots, with either single or dual controls. The main cabin area normally had seating arranged for 10 passengers (SM-6000-B1); by eliminating one or two of the front passenger seats, the space could be converted with metal bins to carry mail-cargo and baggage. To provide easier access to pilot's cabin and cargo bins up forward, a door installation on right side front was available. All windows were of shatter-proof glass, and any window could be opened for ventilation throughout length of the cabin; cabin lights and ventilators were also provided. Main cabin entry door was to the rear on right side. The wing framework in two halves, was built up of chrome-moly steel tube spar beams that were welded into Warren truss girders, with wing ribs riveted together of square duralumin tubing; the leading edges were covered with dural metal sheet and the completed framework was covered in fabric. A fuel tank of 60 gal. cap. and one of 20 gal. cap. was mounted inboard in each wing half. The engine nacelles were mounted into a truss connecting the wing bracing struts, and from this extended the landing gear system using "Aerol" shock absorbing struts. The wheels were normally 36x8 and Bendix brakes were standard equipment; low pressure 35x15-6 Goodyear "airwheels" were optional. The fabric covered tail-group was built up of welded 4130 and 1025 steel tubing; both vertical fin and horizontal stabilizer were adjustable for trim during flight. Adjustable metal propellers, electric engine starters, a battery, generator, navigation lights, lighted instrument panel, a tail wheel, fire extinguishers, chrome-plated cabin hardware, and speed-ring engine cowls were standard equipment. Low pressure airwheels, wheel pants or wheel fenders, cabin heaters, lavatory room, one-way or two-way radio installation, night-flying equipment, dual wheel controls, and custom interiors were optional. The next development in the Stinson "Tri-Motor" was the model U as described in the chapter for ATC # 484 of this volume.

Listed below are SM-6000-B entries as gleaned from registration records:

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		)-B (# 5015) 3 L <sub>3</sub>	yc. 215
NC-11122;	,,	( <b>#</b> 5016)	,,
NC-11124;	,,	(# 5017)	,,
NC-11119;	,,	(#5018)	,,
NC-11120;	,,	( <b>#</b> 5019)	,,
NC-484Y;	,,	( <b>#</b> 5020)	,,
NC-11153;	,,	(#5021)	,,
NC-11155;	,,	(# 5022)	,,
NC-11170;	,,	(# 5023)	,,
NC-11174;	,,	( <b>#</b> 5024)	,,
NC-11175;	,,	(#5025)	,,
NC-11176;	,,	(#5026)	,,
NC-11177;	,,	(# 5027)	,,
NC-10804;	,,	(# 5028)	,,
NC-10807;	,,	(# 5029)	,,
NC-10808;	,,	(# 5030)	,,
NC-10809;	,,	(# 5031)	,,
NC-10810;	,,	(# 5032)	,,
NC-10811;	,,	(# 5033)	,,
NC-10813;	,,	(# 5034)	,,
NC-10814;	,,	(# 5035)	,,
NC-10860;	,,	(# 5036)	,,
NC-10818;	,,	(# 5037)	,,
NC-10822;	,,	(# 5038)	,,
NC-10823;	,,	(# 5039)	,,
NC-11167;	,,	(# 5040)	,,
NC-10840;	,,	(# 5041)	,,
NC-10843;	,,	(# 5042)	,,
NC-10844;	,,	(# 5043)	,,
NC-10845;	,,	(# 5044)	,,
NC-10846;	,,	(# 5045)	,,
NC-10847;	,,	(# 5046)	,,
NC-10858;	,,	(# 5047)	,,
NC-10872;	,,	(# 5048)	,,
NC-10871;	,,	(# 5049)	,,
NC-10894;	,,	(# 5050)	,,
NC-10891;	,,	(# 5051)	,,
NC-10891; NC-10892;	,,	(# 5051) (# 5052)	,,
NC-10893;	,,	(# 5052) (# 5053)	,,
NC-10095, NC-12168;	,,	(# 5054)	,,
NC-12130;	,,	(# 5054) (# 5055)	,,
NC-12135;	,,	(# 5056)	,,
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Serial # 5015 was 9 pl. Club Model; ser. # 5036 was 8 pl. Club Model; all others were either 11 pl. all-passenger type, or 8-9-10 pl. mail-passenger versions at different times; ser. # 5033 to Honduras in 1932; this approval expired 5-1-33.