

## Stinson Model A Low-Wing Airliner

• The Model A, a high-speed, low-wing tri-motor airliner, powered with Lycoming R-680BA engines and designed to fill a new place in scheduled air transportation, will be placed in production by Stinson Aircraft Corporation early this spring.

When the design was begun in 1932, it was not the intention of the company to build a large transport for long haul transcontinental operation as all of their experience had been centered on smaller units for frequent short haul service. A survey of the situation at that time indicated the need for a fast tri-motor of good performance which would sell at less initial cost than the larger transports and operate for less cost per passenger mile.

These planes are intended for bad weather flying and night flights, but principally for use as high-speed "parallel feeders" for the big planes. This means that the Model A could handle the mail, passenger and express business from the intermediate cities now inadequately served by the large transport, due to the added costs of such stops and the reduced through speeds.

For example, high-speed service is now available from coast to coast, but the transcontinental planes do not stop at such important cities as Albany, Rochester, Dayton, Cincinnati, and others of equal importance. To furnish the same superior service to these cities, the Stinson Airliner could leave terminals an hour in advance of the transcontinental plane, stop at the intermediate cities, collect passengers and deliver them to a terminal at which the transcontinental plane made a regular stop, thus providing a service not now available.

The need for this type of Airliner is obvious to the operators of all major airlines in this country, with the exception of those interested only in the transcontinental routes. Some of the airlines also have routes which cannot support big planes and these will need smaller

planes to do the job more economically.

Many foreign countries must have modern, high-speed multi-motored airplanes. The new Model A Airliner meets their requirements because it does not have either the finances or traffic to support the big planes which are doing so well on the main traffic lanes in the United States.

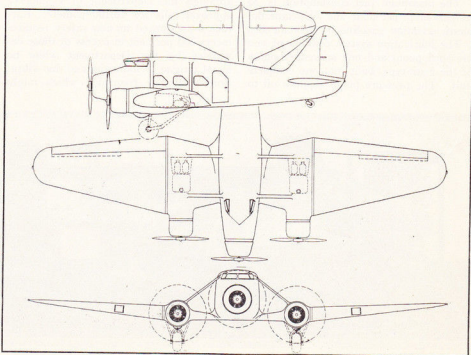
The Model A is powered by three Lycoming nine-cylinder, radial engines rated 240 horsepower each at 2000 r.p.m. It is of low-wing design, with the inner section of the wings "gulled" and braced to avoid the use of the deep cantilever sections. The wheels retract into nacelles and the "speed arresters" (flaps) extend from nacelle to nacelle on the under-surface of the wings. They may be operated in unison with retraction of the wheels, if desired.

To complete this design, it was neces-

sary to develop a new type of sesqui-spar cantilever wing which was originally considered in 1931. With this wing an accomplished fact, the balance of the airplane did not deviate to any great extent from standard construction practice as the entire structure is of chrome-molybdenum tubing, welded and heat treated in the same conventional manner as the other Stinson tri-motored Airliners.

Engines are aproned with metal within the exhaust areas, this being several feet back of the cylinder heads and out from the center line. The remainder of the structure is fabric covered.

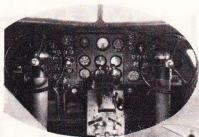
Special attention has been given to seating comfort, vision, quietness, ventilation, heating and other modern airline prerequisites. The insulated cabin has adjustable hammock-type chairs for eight people, four of whom may face to a com-



Three-view outline plans of the high-speed Stinson Model A Airliner

# THE STINSON

# MODEL 'A' is the World's Fastest and Most Economical Trimotored Airliner



## • THE NEW ROAD TO REVENUE

### SPECIFICATIONS

Cruises above 155 MPH at low altitudes.

Take-off Run—under 800 feet with full load.

Initial Rate of Climb with full load—1000 feet per minute.

Landing Run, with full load—600 feet.

Fully loaded will climb above 8000 feet on two engines.

Gas Consumption—42 Gallons per hour.

Gas Capacity—160 Gallons.

Useful Load—3080 Pounds.

8 Comfortable Passenger Seats.

3 Baggage and Mail Compartments, with total allowable capacity of 800 pounds.

3 Reliable Lycoming 260 HP Transport Motors.

3 Lycoming-Smith Controllable Pitch Propellers with chrome-vanadium steel blades.

Landing Flaps — nacelle to nacelle.

Sperry Horizon and Gyro, Blind Flying Instruments, Landing Lights, Flares, Shielding and Bonding, Airwheels, Hydraulic Vacuum Booster Brakes.

More passengers and more express poundage can be had. Tap these reservoirs of traffic.

Fast, modern airplane service to medium sized cities backed up by intensive traffic solicitation is the new road to revenue.

The major cities have responded with more traffic to the fine service offered by high-speed Transcontinental planes which make fast schedules by reducing the number of stops and by flying at high altitudes, but Transcontinental planes do not serve the shorter hauls adequately.

Therefore, the medium sized cities, which far outnumber the large terminals and which have the greatest need for faster service, are either being neglected or are offered airplane service which is not sufficiently attractive to impel its use. For these reasons, the fullest possibilities of the short haul are not being realized.

As early as 1929, Stinson foresaw the revenue opportunities of this situation and has produced single and trimotored planes capable of making frequent stops, serving more people, and producing the largest NET RETURN.

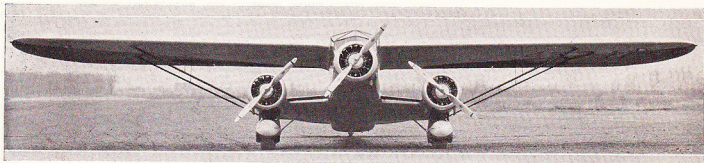
The latest Stinson Trimotored Airliner was conceived and built to serve the shorter haul in an economical manner. Coupled with trimotored safety for night and bad weather flying, it MAKES GOOD high speeds at low altitudes. Its trim and sturdy lines have eye appeal, while the quiet, spacious cabin, comfortable reclining chairs and fine visibility, are several of the many attractive features which expert Traffic Men know that the public now demand.

It is our belief, backed by having built 77 Trimotors which have flown more than 25 million miles, that this latest Stinson Airliner will produce GREATER NET RETURNS on short haul runs than any other multimotored transport built today.

Modern design, proven construction, and known maintenance costs, make this Airliner the safe buy of the year for forward seeing Operators who believe that people will use airplanes in ever increasing numbers if offered fast, frequent, dependable service at fair rates.

## STINSON AIRCRAFT CORP., WAYNE, MICH.

■ World's Largest Builders of Cabin Airplanes



## STINSON MODEL U TRIMOTOR

**F**OUR years of development work plus two years' operation experience are incorporated in the new Stinson Model U, powered with three 240-horsepower Lycoming engines. With the introduction of its new ten-passenger trimotored airliner, exhibited for the first time at the Detroit Aircraft Show, the Stinson Aircraft Corp. makes its strongest bid in the medium sized multi-motored field. To break down the operators' resistance to the purchase of new airline equipment, the design problem involved exceeding the economical features of previous Stinson trimotors while at the same time providing the operator with a better plane of greater profit possibilities.

How the Model U has met these problems is best described by comparison with its Model T predecessors, which have flown more than 8,000,000 miles in airline service during the past two years.

The price has been reduced.

Horsepower has been increased from 645 to 720. Three new 240-horsepower Lycoming radial transport engines are used instead of the previous 215-horsepower Lycomings.

Cruising speed has been increased from

110 to 123 miles per hour.

Gross loads have been increased from 8600 to 9300 pounds without increasing wing or horsepower loading.

Service ceiling, fully loaded, has been increased from 12,500 to 14,500 feet.

Altitude is maintained, fully loaded, on two engines, at 7,000 feet instead of 6,000 feet.

Standard gasoline capacity has been increased from 120 to 140 gallons, giving an increased cruising range of 100 miles.

Baggage capacity has been enlarged from 147 to 250 pounds.

Cabin noise has been materially decreased, due to additional soundproofing plus the fact that all propeller overlap has been eliminated.

Cabins have been widened seven inches, which makes possible wider chairs, deeply tufted with arm rests on both sides, and wider aisles. Additional head room has also been provided, thus permitting the installation of hat and coat racks.

More leg room is provided by carrying all baggage in the lower stub wing, which has the further advantage of placing this load directly over the center of gravity.

A large dressing room with complete lavatory facilities is now provided in the

rear of the cabin, utilizing space formerly reserved for carrying baggage.

A ventilating system has been provided which changes the air in the cabin every four minutes, and heating has been provided by taking heat from three engines instead of from only the center engine, as was formerly the case.

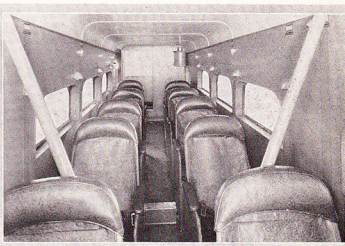
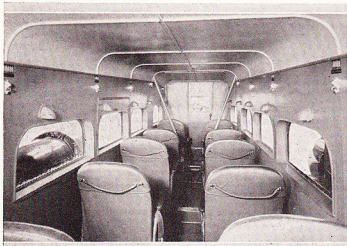
Individual reading lights have been provided for each passenger and are shaded so that occupants of other seats are not disturbed.

Passenger vision has been improved by eliminating certain struts and by lowering the outboard engines, which enables the passenger to look directly over the top of the engine.

Ply-metal, with sound-deadening balsam wool sandwiched between, is used on the cabin walls, and the interior finish conforms to the latest color designs in marine and pullman practice. Cork linoleum is now used on the floors, and all corners have been rounded for ease in cleaning.

Full airwheels are used instead of high pressure tires.

Engines are mounted directly on the lower stub wings, thus securing a lower center of gravity and increased inherent



Passengers' cabin of the latest Stinson Model U Trimotor showing the improved seating arrangement for ten passengers