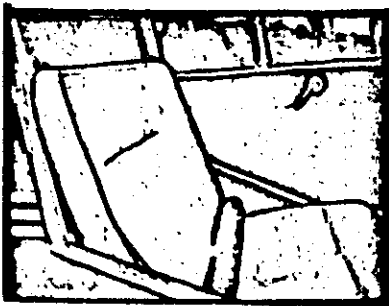
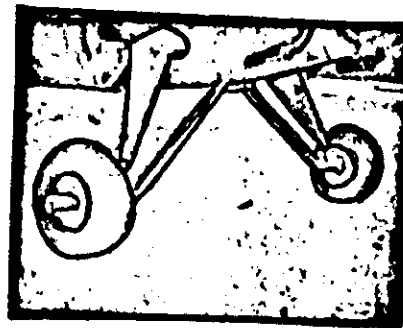


ACCOMODATIONS AND FEATURES: Model 185 Skyranger

- 1) 2 place
- 2) Complete cabin two tone upholstery
- 3) Standard color combinations
- 4) Sound proofing
- 5) Ash trays-glove compartments, with lock
- 6) Sliding windows
- 7) Lucite windshield and window material
- 8) Cabin heater
- 9) Scientifically designed cushions and seat backs
- 10) Spin resistant by use of wing slots
- 11) Wide cabin doors
- 12) Curved stick allows leg room
- 13) Low engine cowling provides extraordinary visibility even when taxiing
- 14) Engine cowling easily raised or removable for ease of maintenance and inspection
- 15) Fuel injection
- 16) Provisions for radio transmitter and blind flight instruments
- 17) Dampened noise and vibration
- 18) Designed so servicing is reduced to a minimum
- 19) Fuselage tubing is of larger diameter and greater wall thickness than commonly used in light aircraft
- 20) Steerable tailwheel reduces wear on brakes and makes cross wind taxiing easier
- 21) Streamlined large-area fin gives directional stability in rough air
- 22) Leading edge wing slots give complete and positive aileron control at slow speeds, even throughout the stall range.
- 23) Fuel tanks are crash-resistant.



scientifically designed
cushions and seat backs.



fixed gear

STANDARD- EQUIPMENT:

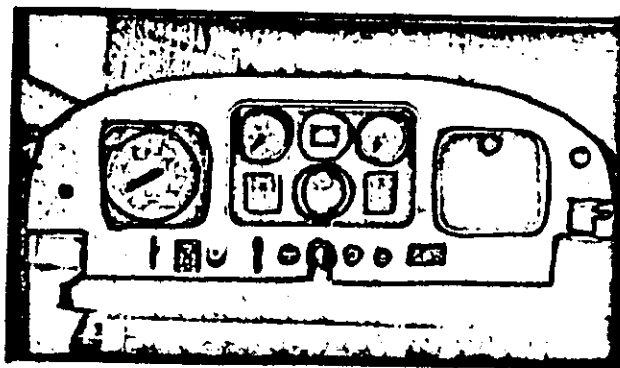
- 1) Airspeed indicator
- 2) Altimeter
- 3) Tachometer
- 4) Oil pressure and temperature gauges
- 5) Compass
- 6) Switch
- 7) Two fuel gauges
- 8) Locks for two cabin doors
- 9) Rug
- 10) Exhaust silencer
- 11) Navigation lights
- 12) Landing lights
- 13) Radio receiver (Motorola)
- 14) Cabin heater

OPTIONAL-EQUIPMENT:

- 1) Radio transmitter
- 2) Special Instruments
- 3) Wheel pants
- 4) Adjustable pitch propeller

BAGGAGE COMPARTMENT:

Location- rear of seat
measurement-5 cubic ft.
weight limit-50 lbs.



Instrument panel

PERFORMANCE DATA: COMMONWEALTH SKYRANGER 185 with C-85 engine

High Speed-115 MPH

Cruising speed-180 MPH

Landing speed-48 MPH

Stalling speed-43 MPH

Rate of climb (fst. min)-650 ft.

Range of cruising speed-500 miles

Service ceiling-14,000 ft.

Take-off distance-land (no wind)-450 ft.

Landing run-land (no wind)- ft.

WEIGHTS:

Gross weight (lbs) -1450

Empty weight(lbs)-910

Useful load (lbs)-540

Maximum payload-lbs-

Wing loading (lbs per sq. ft)-8.81

Power loading (lbs. per HP)-17.06

PERFORMANCE FOR SYRYANGERS WITH A-75 engine

Maximum speed-110 MPH (176 km.h)

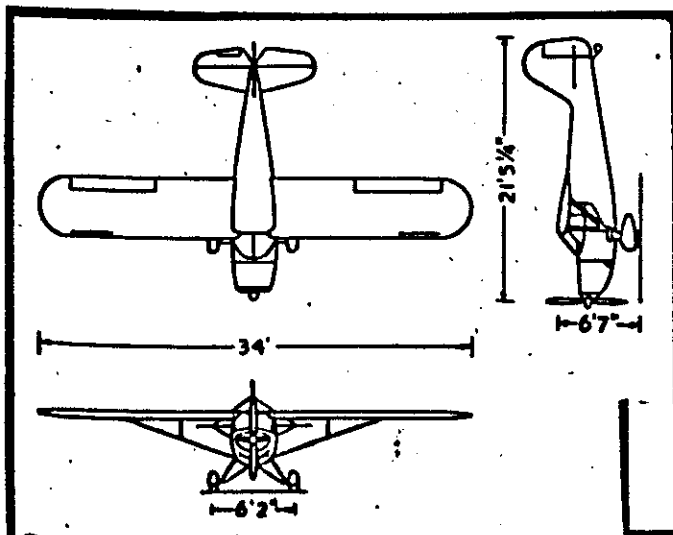
Cruising speed-100 MPH (160 Km.h)

Stalling speed-40 MPH (65 Km.h)

Initial rate of climb-
625 ft/min. (191m./min)

Service ceiling-14,000 (4,270 m)

Cruising range-500 miles (800 km)

WEIGHTS

Gross Weight (lbs.)-1450	Wing Loading (lbs. per sq. ft.)-8.81
Empty Weight (lbs.)-910	Power Loading (lbs. per hp.)-17.06
Useful Load (lbs.)-540	
Maximum Payload (lbs.)-	

Construction:Type-Two seat light cabin monoplane

Wings- High wing
 covering-fabric
 Spars-spruce
 ribs-spruce
 leading edges-sheet Dural
 Struts-2 per wing, dural

Structure consists of two solid spruce spars, spruce ribs with pressed-in fibre gussets, metal leading edge-steel drag bracing and fabric covering. Semi-circular steel-tube wing-tips, Ailerons have spruce ribs and spars, duralumin leading edge and fabric covering. Aluminum-alloy fixed slots bolted to primary structure of wings. Wings braced to bottom fuselage longerons by steel-tube Vee struts.

Fuselage- Construction-steel tube, structure(welded)
 covering-fabric

Tail Unit- type- Wire braced
 frame-work metal
 covering-fabric
 elevator tab-metal

The fin is integral with fuselage, duralumin trimming-tab in elevator controlled from cabin, adjustable tab in rudder.

Undercarriage- divided type, hydraulic shock-absorbers with half axles hinged to center-line of under side of fuselage. Wheel fairings, mechanical brakes, steerable tail wheel.

Tail wheel- Steerable (full swivel) spring mounted
 manufacturer-Scott

Wheels-Goodyear 6.00 x 6 size.

Landing gear-Conventional
 shock absorber-hydraulic with metal spring.

Power plant- A-75, or C-85 engine (Continental)
 horse power- 75 or 85 HP

A four-cylinder, horizontally opposed air-cooled engine on detachable welded steel-tube mounting. Main fuel tank (24 US

Construction (contd):

gallons) in starboard wing-root, with provision for additional tank of same capacity in port wing.

Fuel and Oil consumption:

Fuel consumption- 6.0 gals. per hr.

Oil consumption- 1/4 pt. per hr.

Fuel capacity (gals)-24

Electrical Sys.-

Voltage-12 volts

Power supply:

Generator manufacturer-Delco Remy

Voltage-12 volts

Capacity-12-13 amperes

Voltage regulator manufacturer Delco Remy

Reverse-Current relay-yes

Accommodations:

Enclosed cabin seating two side by side with dual controls. Doors on each side. Large baggage compartment aft of cabin.

Battery-

Capacity-24 ampere hours

Manufacturer-Reading

Grounding-negative

Starter- Manufacturer-Delco Remy

Propeller- Type-Fixed pitch

Manufacturer-Sensenich

Material-Wood

General Data on earlier models:Ranger Model 165:

Wing span-34 ft.

length-21 ft.,9 in.

height-7 ft.,7 in.

Wing area-164.6 sq. ft.

Power loading-8.2 lb./hp.

wing loading-20.77 lb./sq.ft.

Empty weight-760

baggage-135 lb.

Gross weight-1,350 lb.

Fuel-18 gals.

Construction: Fuselage; Chrome-moly steel tube truss type structure, covered with fabric, enclosed side-by-side seats with dual controls, baggage compartment aft of seats.

Wings: High-wing monomplane braced by welded steel Vee struts, solid spruce spars and spruce ribs with fibre gussets pressed in place with fabric, single steel drag truss and tie rods, semi-circular wing tip of steel tubing, wing slot of alum-alloy construction and is bolted to primary wing structure by means of steel fittings, ailerons of spruce ribs and spars with fabric covering.

Tail group: Fin integral with fuselage, all surfaces fabric covered, structure of welded steel consisting of tubular spars and channel ribs, adjustable trim tabs on rudder and elevators, stabilizer braced top and bottom to fin and fuselage.

Landing Gear: Fixed divided strut type, spring mounted.

Steerable tail wheel.

Standard Equipment- Two-blade wooden propeller, Shinn Wheels and brakes, Hydraulic shock absorbers, carburetor air heater, fire extinguisher, first aid kit, wiring for navigation lights, complete upholstery.

Instruments: Airspeed indicator, altimeter, dual ignition switches oil pressure and temperature gauges.

General Data on earlier models(contd):

Performance: Maximum speed-105 MPH
Cruising speed- 95 MPH
Landing speed-40 MPH
Service Ceiling- 12,000 ft.
Rate of climb-550 Ft/min.
Range-450 miles

Engine-Continental A-65
HP- 65 at 2,350 RPM

MODEL 175:

Same as above model 165 except for:
Power loading-18 lb./sq.ft.
baggage-125 lb.
Maximum speed-110 MPH
Cruising speed-100 MPH
Landing speed-40 MPH
Service ceiling- 14,000 ft.
Rate of climb- 625 ft./min
Range-400 mi.
Engine-Continental-A-75
HP-75 at 2,650 RPM