

Specification and Description “Exhibit A”

SKYLANE

Specification and Description

Dated January 2007

Beginning With Serial #18281876

Manufacturer: Cessna Aircraft Company
Model: 182T

Initial _____



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The Cessna 182T Skylane

Introduction

This document is published for the purpose of providing general information for the evaluation of design, performance and equipment of the Cessna Skylane. Should more information be required, please contact:

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This document supersedes all previous Specification and Description documents and describes only the Skylane Model 182T, its powerplant and equipment. Also included are the warranties applicable to the Skylane Model 182T aircraft, the Textron Lycoming IO-540-AB1A5 engine, the McCauley propeller and the OEM-installed Bendix/King and Garmin avionics. In the event of any conflict or discrepancy between this document and the basic purchase agreement, the basic purchase agreement language shall govern. Due to the time span between the date of this Specification and Description and the scheduled delivery date of the aircraft, Cessna reserves the right to revise the “Specification” whenever occasioned by product improvements, government regulations or other good cause.

Specification and Description

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General Description

All information herein applies to the Skylane (Model 182T).

The Skylane aircraft is an all-metal, single-engine piston, high-wing monoplane with a four-person seating capacity including a crew of one or two. Suitable allowance for luggage is provided. The Model 182T is certified to the requirements of U.S. FAA Federal Aviation Regulation Part 23 through amendment 23-6, including day, night, VFR and IFR.

Approximate Dimensions

Overall Height (max).....	9'4"	(2.84 m)
Overall Length.....	29'	(8.84 m)
Wing		
Span (overall).....	36'	(10.97 m)
Area.....	174 sq ft	(16.2 sq m)
Cabin		
Height (max).....	48.5"	(1.23 m)
Length (firewall to aft baggage area).....	134"	(3.40 m)
Width.....	42"	(1.07 m)
Cabin Door		
Height (front).....	41"	(1.04 m)
Height (rear).....	38.5"	(.98 m)
Width (top).....	32"	(.81 m)
Width (bottom).....	36.5"	(.93 m)
Baggage Door		
Height (front).....	22"	(.56 m)
Height (rear).....	20.5"	(.52 m)
Width.....	15.8"	(.40 m)

Design Weights and Capacities

Maximum Ramp Weight.....	3,110 lbs	(1,411 kg)
Maximum Takeoff Weight.....	3,100 lbs	(1,406 kg)
Maximum Landing Weight.....	2,950 lbs	(1,338 kg)
Standard Empty Weight.....	1,997 lbs	(906 kg)
Maximum Useful Load.....	1,113 lbs	(505 kg)
Baggage Allowance.....	200 lbs	(91 kg)
Fuel Capacity		
Total capacity.....	92 gal	(348.2 L)
Total usable.....	87 gal	(329.3 L)
Total capacity each tank.....	46 gal	(174.1 L)
Total usable capacity each tank.....	43.5 gal	(164.6 L)
Oil Capacity		
Sump.....	8 qts	(7.5 L)
Total Capacity.....	9 qts	(8.5 L)

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Skylane Equipment List

The following list of equipment is included on the standard aircraft and it does not reflect optional equipment.

NAV III AVIONICS:

GDU-1044B Primary Flight Display (PFD)
GDU-1044B Multi-function Display (MFD)
GMA-1347 Digital Audio Panel w/Marker Beacon/Intercom
Marker Beacon Antenna
GIA-63W NAV/COM/GPS/WAAS w/GS #1
GIA-63W NAV/COM/GPS/WAAS w/GS #2
VHF/GPS Antenna
VHF/GPS/XM Antenna
NAV Antenna
GTX-33 Transponder - Mode S w/TIS
Transponder Antenna
GEA-71 Engine/Airframe Computer

- CHT/EGT Sensors - All Cylinders
- Fuel Flow Meter
- Manifold/Tachometer/Vacuum Sensors

GRS-77 AHRS
GDC-74 Air Data Computer w/OAT Probe
GMU-44 Magnetometer
GFC – 700 Autopilot

- Go Around Switch
- Control Wheel Steering

ME406 Two Frequency Emergency Locator Transmitter
GDL-69A Flight Information System (FIS) w/XM Radio
Emergency Locator Transmitter External Antenna
Emergency Locator Transmitter Remote Mounted Switch
WX-500 Stormscope
NY-163 Stormscope Antenna
Auxiliary Stereo Input Jack

Avionics Circuit Breaker Panel
Control Wheel Push-To-Talk Switch - Pilot/Copilot
Mic & Phone Jacks - Pilot/Copilot/Passengers
Auxiliary Stereo Input Jack
Single Engine Driven Vacuum Pump System
Backup Mechanical Instruments

- Attitude (Vacuum Gyro)
- Airspeed
- Altimeter

Magnetic Compass
Pitot System - Heated
Static System
Alternate Static Source
Audible Stall Warning System – Heated

ELECTRICAL POWER:

Alternator, 28 Volt, 95 Amp
Battery, 24 Volt, 15.5 AH, Manifold Type
Standby Battery, 24 volt 6.2 AH
Standby Battery Controller
Electrical Circuit Panel

- Ignition & Starter Switch, Key Operated
- Alternator/Battery Master Switch
- Split Avionics Master Switch
- Circuit Breakers, Electrical
- Switches, Electrical

Electrical J-Box

- Alternator Control Unit
- Battery Current Sensor
- Ground Service Receptacle
- Starter Relay
- Alternator Relay
- Battery Relay
- Ground Power Relay

Auxiliary Power Jack -12 Volt (fore & aft)

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ENGINE INDICATION SYSTEM (ELECTRONIC)

Ammeter
Voltmeter
Vacuum
Manifold Pressure
Oil Pressure and Temperature
Tachometer - Hour Recorder
Fuel Flow (GPH)
LH/RH Fuel Quantity
CHT - Cylinder Head Temperature
EGT - Exhaust Gas Temperature
Flight Hour Recorder
Electronic Checklists

ANNUNCIATION – CAUTION AND WARNING ALERTS (PFD)

- LH & RH Low Fuel
- Low Vacuum
- Low Oil Pressure
- Low Voltage
- Standby Battery
- Pitch Trim
- Self Test Message Advisories
- Traffic (standard TIS)

ENVIRONMENTAL:

Windshield Defroster, Pilot
Ventilator, Adjustable (6 places)
Heating System, Shrouded Muffler w/Firewall Valve
Insulation / Soundproofing
Carbon Monoxide Detection System

EXTERIOR:

Epoxy Corrosion Proofing, All Structure
LH Door, Pilot w/Hinged Window, Lock and Key

RH Door, Copilot w/Hinged Window
Baggage Door, w/Lock and Key
Rear Window
All Windows Tinted
Gear Jack Pads
Fixed Landing Gear
White Polyurethane Exterior Paint
Refueling Steps and Handles, Wing Struts and Fuselage
Fixed Cabin Entrance Steps
Tie Down Rings, LH/RH Wing & Tail
Tube Type Tires

- Nose – 5.00 X 5
- Mains - 6.00 X 6

Conical Camber Wing Tip
Strut Braced, Camber Lift Wings
Static Wicks

EXTERIOR LIGHTS:

Ground Recognition - Vertical Tail, Reduced Drag
Navigation, LH/RH Wing Tip & Tail
Navigation Light Detectors, LH/RH
Wing Tip Strobe, LH/RH
High Intensity Discharge (HID) Landing and Taxi Lights, LH Wing

- HID Electronic Ballast

Underwing Courtesy, LH/RH

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FLIGHT CONTROLS:

Hydraulic Brakes, Toe-Operated
Parking Brake
Stainless Steel Control Cables
Dual Flight Controls - Aileron/Elevator/Rudder
Leather Wrap Control Wheels, All Purpose Pilot/Copilot
Pilot Control Wheel

- Pitch Trim
- AP Disconnect
- Control Wheel Steering

Elevator Trim - Manual/Electric
Rudder Trim - Manual
Electrical Preselect - Flaps
Steerable Nose Wheel
Aileron and Elevator Control Lock

FUEL SYSTEM:

Electric Auxiliary Fuel Pump
Engine Driven Fuel Pump
Integral Wet Wing Fuel Tanks, 87 Gal. Usable
Fuel Selector Valve, Left/Both/Right/Off
Fuel Strainer, Incorporated with Fuselage Quick Drain
Fuel Tank Quick Drain, 5 per wing
Fuel Sampler Cup
Fuel Vapor Return System

INTERIOR:

General interior color scheme is Taupe / Charcoal
Kydex door sidepanel, decorative fabric inserts
Leather Seating Surfaces w/ Perforated Leather Insert w/ Vinyl trim
Vinyl grip flooring in crew area
Carpeting in passenger area
Amsafe Inflatable Seat Belts & Shoulder Harness STC, Inertia Reel, All Seats

Pilot and Copilot Seats

- Adjustable Fore and Aft
- Reclining Backs
- Vertical Adjustment

Rear Seat Bench w/Individual Reclining Back
Cup Holders - Passenger
Jepp Map Storage Console w/Cup Holders
Approach Plate Holder, Pilot Control Wheel
Armrests - Pilot & Copilot Doors/Passenger Side Panels
Pilot's Check List
Pilot's Operating Handbook
Fire Extinguisher, Hand Held
Instrument Panel Glareshield
Clothes Hanger Bar
Metal Instrument Panel, w/Removable Stby Instr. Subpanel
Map/Glove Compartment
Baggage Net
Radio Call Plate
Map & Storage Pockets
Cabin Door Scuff Plates
Rosen Sun Visors, Pilot & Copilot
Tow Bar

INTERIOR LIGHTING:

LED Pilot/Copilot Cabin Overhead LED Lights
LED Passenger Overhead Light
Interior Lights Dimming Control
Map Light, Pilot Control Wheel
Sub-Panel Lighting (LED Backlighting)

- Flaps
- Throttle
- Mixture
- Propeller
- Environmental Controls (Air and Heat)

Switch Panel Lighting (LED Backlighting)

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- Avionics and Master Switches
 - Dimming Reostats
 - Landing, Taxi and Nav Switches
 - Beacon, Strobe, Boost Pump, Pitot Heat
 - 12 volt Cabin Power
 - Standby Battery Switch
- LCD Lighted Glass Panel Displays:
- Electronic Flight Instruments
 - Electronic Avionics Instruments
 - Electronic Engine Instruments
- Audio Panel (Backlighted)
Radio Call Plate (Backlighted)
LED Lighted Circuit Breaker Panel
Compass Internally Lighted
Standby Attitude, Altimeter, Airspeed Internally Lighted

POWER PLANT AND ACCESSORIES:

Lycoming IO-540-AB1A5 Engine
230 HP @2400 RPM
Certified for 100LL & 100 Fuel
Fuel Injection System
Tubular Steel Engine Mount
Dynafoal Rear Engine Mount
Automatic Alternate Engine Air
Oil Cooler
Rigid - Mounted Cowling
Manual Cowl Flaps
Induction Air Filter
Full Flow Oil Filter
Throttle Control
Vernier Mixture Control
Vernier Propeller Control
Dual Ignition System, Shielded Magneto
Engine Exhaust Muffler

McCauley Constant Speed, 3 Blade Metal Propeller
Propeller Governor
Propeller Spinner, Polished
Electric Starter

Optional Equipment

Air Conditioning -Keith Products (STC -12,000 btuh / Engine Driven)

TAWS-B Terrain (Garmin) NAV III Avionics

TAS Traffic (Bendix King KTA 870) – NAV III Avionics

ADF KR87 – NAV III Avionics – Separate control head - displayed on PFD (International only)

DME KN63 – NAV III Avionics – Integrated control - displayed on PFD (International only)

C406-N Three Frequency Emergency Locator Transmitter

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Exterior Striping Options

519D: Ruby Red Pearl and Antique Gold Pearl Painted Stripes; Cessna Logo, Skylane Logo and Registration Number: All Dark Red Vinyl.

519E: Phantom Gray Pearl and Yellow Pearl Painted Stripes; Cessna Logo, Skylane Logo and Registration Number: All Charcoal Metallic Vinyl.

519F: Parade Blue Pearl and Cumulus Gray Pearl Painted Stripes; Cessna Logo, Skylane Logo and Registration Number: All Shadow Blue Vinyl.

Interior Options

Fabric Seat Surfaces w/ Vinyl trim

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Performance Conditions

All estimated performance data are based on airplane weights at 3,100 pounds; standard atmospheric conditions; level, hard surface, dry runways; and no wind. They are calculated values derived from flight tests conducted by Cessna Aircraft Company under carefully documented conditions and will vary with individual airplanes, pilots, and numerous other factors affecting flight performance.

Speed, CAS

Maximum at sea level..... 150 kts

Cruise, 80% power at 7,000 ft..... 145 kts

Cruise (Recommended lean mixture with fuel allowance for engine start, taxi, takeoff, climb and 45-minute reserve)

80% power at 7,000 ft..... range 773 nm (1,432 km)

87 gallons usable fuel..... time 5.4 hr

55% power at 10,000 ft..... range 930 nm (1,722 km)

87 gallons usable fuel..... time 7.60 hr

Rate of Climb at Sea Level..... 924 fpm (282 mpm)

Service Ceiling..... 18,100 ft (5,517 m)

Takeoff Performance

• Ground roll..... 795 ft (242 m)

• Total distance over 50-ft obstacle..... 1,514 ft (461 m)

Landing Performance

• Ground roll..... 590 ft (180 m)

• Total distance over 50-ft obstacle..... 1,350 ft (411 m)

Stall Speed, CAS

• Flaps up, power off..... 54 kts

• Flaps down, power off..... 49 kts

Wing Loading..... 17.8 lbs/sq ft (86.9 kg/sq m)

Power Loading..... 13.5 lbs/hp (6.1 kg/hp)

Engine: Lycoming - IO-540-AB1A5 230 BHP @2,400 RPM

Propeller: McCauley 3-bladed Constant Speed, Diameter 79 in (2.01 m)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.