### Piper Aircraft Corporation

# Dakota PA 28-236

# **Specifications**

ENGINE	
Manufacturer	Lycoming
Model	0-540-J3A5D
Rating (hp @ rpm)	235 @ 2400
Number of Cylinders	6
Recommended TBO (hrs.)	2000
	2000
PROPELLER	
Manufacturer	Hartzell
Number of Blades	2
Туре	Constant Speed
Diameter	80/203
WEIGHTS	
Gross Weight (lbs./kg)	3000/1361
Standard Empty Weight (lbs./kg)	1608/730
(Includes unusable fuel, full oil and full	
operating fluids)	
Standard Useful Load (lbs./kg)	1392/631
WING AREA AND LOADINGS	
Wing Area (ft.2/m²)	170/15.8
Wing Loading (lbs./ft.²)/(kg/m²)	17.6/86.1
Power Loading (lbs./hp)/(kg/hp)	12.8/5.8
	12.0/ 5.0
DIMENSIONS	
Wing Span (ft./m)	35.4/10.8
Length (ft./m)	24.7/7.5
Height (ft./m)	7.2/2.2
Cabin Length (Instrument Panel to Rear Bulkhead)	
(in./cm.)	97.0/246.4
Cabin Width (in./cm.)	41.5/105.4
Cabin Height (in./cm.)	49.0/124.5
Cabin Volume (ft.3/m3)	106/3.0
(including luggage area)	
Headroom (seat to ceiling)	
Front Seats (in./cm.)	36/91.4
Rear Seats (in./cm.)	36/91.4
Baggage Door Size (in./cm)	22/55.9 x 20/50.8
Cabin Door Size (in./cm)	36/91.4 x 35/88.9
Wheel Base (ft./m)	6.5/1.98
Wheel Tread (ft./m)	10/3.05
FUEL CAPACITY	
Two 38.5 gal. tanks (gal./L)	77/291
Usable Fuel (gal./L)	72/273
OIL CAPACITY (qts./L)	12/11.36
	12/11:30
BAGGAGE	
Volume (ft.3/m3)	26/.74
(with 2 cu. ft. hat shelf)	
Capacity (lbs./kg)	200/91

# **Performance**

MAXIMUM SPEED (kts/kmh) (TAS at Gross Weight)		148/274
CRUISING SPEEDS (TAS at Gross Weight)	Best Power	Best Economy
Optimum Altitude 75% power (kts./kmh)	144/267	139/257
65% power (kts./kmh) 55% power (kts./kmh)	138/255 130/240	134/248 126/233

### Performance Continued

#### **CRUISE RANGE**

(Cruising range includes 45 minutes fuel reserve at maximum range power plus allowance for fuel used during taxi, take-off, climb at MCP, cruise at optimum altitude and stated mixture

	best Power	Dest Economy
75% power (nm/km)	650/1204	710/1315
65% power (nm/km)	710/1315	770/1426
55% power (nm/km)	750/1390	810/1500
FUEL CONSUMPTION 75% power (gph/lph) 65% power (gph/lph)	Best Power 13.6/51.5 11.8/44.7	Best Economy 12.7/47.9 10.9/41.3
55% power (gph/lph)	10.1/38.2	9.3/35.2
RATE OF CLIMB (At Sea Level and Gross Wt.) Full Throttle (fpm/mpm)		1110/338
ruii (mottie (ipin/ inpin)		1110/338
STALL SPEED Flaps Down Full 40° (kts./kmh) Flaps Up (kts./kmh)	56/104 65/120	CAS 56/104 63/117
SERVICE CEILING (100 fpm) (ft./m)		17,500/5334
TAKE-OFF DISTANCE (Sea Level, zero wind, standard temperature)		
Ground Run (ft./m)		886/270
Total over 50 ft. obstacle (ft./m)		1216/371
LANDING DISTANCE (Sea Level zero wind, standard temperature)	Std. Brakes	H.D. Brakes
Ground Roll (ft./m)	825/251	640/195
Total over 50 ft. obstacle (ft./m)	1725/526	1530/466

## **Standard Equipment**

#### POWER PLANT AND PROPELLER

Engine - Lycoming 235 hp at 2400 rpm, direct drive, 6 cylinders dual ignition with radio shielding Engine Mount - Dynafocal with internal dampers Propeller — 1 Hartzell, 2 blade, constant speed Propeller Spinner Geared Starter, 12 volt Air Filter, dry type Oil Filter, full flow Oil Cooler Engine machined for vacuum pump (no drive installed) **Dual Mufflers** Cross-over Exhaust System

#### FLIGHT INSTRUMENT AND INDICATORS

Carburetor Heat with manual control

Oil Quick Drain

Piper Airspeed Indicator Magnetic Compass Sensitive Altimeter (in. and mb.) Ammeter Annunciator Panel with push-to-test Alternator inoperative Oil pressure low Gyro pressure low (with pump installed) Tachometer, recording Fuel Quantity Gauges, two Fuel Pressure Gauge Manifold Pressure Gauge Oil Temperature Gauge Oil Pressure Gauge Stabilator Trim Position Indicator

Rudder Trim Position Indicator

#### COCKPIT, FLIGHT AND GROUND CONTROLS

Flight Primary — dual with rams horn type wheels. Provisions for elevator trim and mike button Flight Trim - lower floor Rudder

Stabilator Engine Controls — pedestal Throttle Propeller Mixture Carburetor heat Engine Controls Friction Lock

Best Power

Best Economy

Stall Warning Horn Cabin Heater and Defroster Controls

Steerable Nosewheel, cushioned Brakes

Pilot's toe brakes Co-pilot's toe brakes Parking brake

Landing gear, fixed

**Dual Flight Controls** 

Landing Gear Strut Fairings Provisions for high speed wheel fairings

Wing Flaps, four positions (0°, 10°, 25° and 40°) Wing Flap Control, manual

Fuel Control Selector - OFF, LEFT, RIGHT

**Engine Fuel Primer** 

Cabin Fresh Air Vent Controls, four — individually controlled