

COMMANDER 200

Part V

AERO COMMANDER 200 PERFORMANCE

The following recommended airspeeds have been established by flight tests and are considered good operating technique. As flight tests were conducted with the airplane and engine in good condition, allowances for actual conditions must be made.

AIRSPEEDS

Take-off speeds (IAS)

	MPH	Knots
Normal Take-off		
Take-off	80	65
Climb Out @ 50 Feet	100	87
Obstacle or Soft Field Take-off (20° Flaps)		
Take-off	75	61
Climb Out @ 50 Feet	85	70

Climb Speeds (IAS)

Cruising Climb (Clean)	140	122
Best Rate-of-Climb Speed, S.L.	115	100

Landing Speeds (IAS)

Normal Approach (20° Flaps)	90	78
Obstacle Approach (40° Flaps)	80	70

Maximum Speed (mph) (MAX continuous power)	216
Cruise Speed, 7,500 Ft. 75% Power (mph)	210
Max. Range, 10,000 Ft. 65% Power	
80 Gal. Total Fuel (st. mi.)	1060
Sea Level Rate of Climb (fpm)	1450
Service Ceiling (Ft.)	18,500
Take-off Dist. over 50 Ft. (Ft.)	1150
Landing Dist. over 50 Ft. (Ft.)	1150

Stall Speeds

Altitude loss (as measured from the time the airplane stalls until horizontal flight is regained) in power-off stalls may be as high as 275 feet. The addition of power after the stall reduces the altitude loss considerably.

STALL SPEEDS (Calibrated Airspeed MPH) POWER OFF AT GROSS WEIGHT

Angle of Bank	0°	20°	40°	60°
Flaps Up	77	79½	88	109
Flaps 20° (Take-Off)	66½	68½	76	94
Flaps 40° (Landing)	62	64	71	88

PERFORMANCE FOR STANDARD AIRCRAFT AT GROSS WEIGHT ON A STANDARD DAY.

AIRSPEED LIMITATIONS

Red Line (never exceed)	236 mph (205 k)
Yellow Arc	
(Caution—smooth air only)	210 to 236 mph (182 k-205 k)
Green Arc	
(Normal operating speed)	77 to 210 mph (67 k-102 k)
White Arc (Flaps extended)	62 to 125 mph (54 k-109 k)
Max. Structural Cruising	210 mph (182 k)
Maneuvering	132 mph (115 k)
Max. Gear Retraction Speed	125 mph (109 k)
Emergency Gear Extension Speed	210 mph (182 k)
Max Gear Extended Speed	210 mph (182 k)

ENGINE LIMITATIONS

ENGINE LIMITS: For all operations 285 hp 2700 rpm 29.3 in. Hg.

FUEL: 100/130 Minimum Grade Aviation Gasoline

ENGINE INSTRUMENT MARKINGS

POWER PLANT INSTRUMENTS

Red Line—Maximum-Minimum,
(Do not operate under or over)
Yellow ARC—Caution Range
Green ARC—Normal operating Range

OIL PRESSURE:

Red Lines—10 PSI Min: 100 PSI Max.
Green ARC—30 PSI to 60 PSI

OIL TEMPERATURE:

Red Line—240°F
Green ARC—75°F (Take-off) to 240°F

FUEL PRESSURE:

Red Line—18.0 psi
Green ARC—3.5 psi to 18.0 psi (Operating Range)

TACHOMETER:

Red Line—2700 rpm
Green ARC—600 rpm to 2700 rpm

CYLINDER HEAD TEMPERATURE:

Red Line—460°F, Bayonet Thermocouple

HUDRAULIC PRESSURE:

Red Line—1000 psi min., 1300 psi max.
Green ARC—1000 psi to 1300 psi

MANIFOLD PRESSURE:

Red Line—29.3 in. Hg.

Green ARC—10.0 in. Hg. to 29.3 in. Hg.

MANEUVERS

No acrobatic maneuvers, including spins, approved. Maneuvers involving full application of elevator, rudder or aileron should be confined to speeds at or below the maneuvering speed.

WEIGHT AND BALANCE

At the time of delivery of each airplane, Aero Commander Incorporated provides an Airplane Flight manual which includes all of the necessary data the owner or pilot may need in order to arrive at the necessary weight and balance computation to assure proper loading.