DA20 OPERATING INFORMATION TABLE

Indicated Airspeeds

V_{S0} (Stall speed in LDG configuration, kts)	34
V_{S1} (Stall speed in CRUISE configuration, kts)	42
V_R (Rotate Speed, kts)	44
Lift-off airspeed (kts)	52
Forced landing final approach airspeed (flaps LDG, kts)	**55**
Min. engine-out airspeed to sustain windmilling prop (kts)	**60**
Forced landing final approach airspeed (flaps T/O, kts)	**60**
Forced landing final approach airspeed (flaps CRUISE, kts)	**64**
Normal landing final approach airspeed (kts)	60
No-Flap landing final approach airspeed (kts)	65
V_X (flaps T/O, kts) (Best angle of climb)	60
V_X (flaps CRUISE, kts) (Best angle of climb)	65
V_Y (flaps T/O, kts) (Best rate of climb)	66
V_Y (flaps CRUISE, kts) (Best rate of climb)	70
Best glide airspeed (1764 lbs) (L/D Max)	**73**
V_{FE} (flaps LDG, kts) (Max. Airspeed with flaps extended)	**78**
V_{FE} (flaps T/O, kts) (Max. Airspeed with flaps extended)	**100**
V_A (kts, 1764 lbs) (No full or abrupt control inputs above V_A or overstress conditions will occur.)	**106**
V_{NO} (Max. structural cruising speed, kts)	**118**
Force propeller to windmill if stopped, starter inop (kts)	**137**
V_{NE} (Never exceed airspeed, kts)	**164**

Maneuvering

Positive limit load factor (flaps CRUISE)	+4.4
Negative limit load factor (flaps CRUISE)	-2.2
Positive limit load factor (flaps T/O or LDG)	+2.0
Negative limit load factor (flaps T/O or LDG)	0
Max. permissible bank angle for steep turns (in degrees)	**60**

Voltmeter

Voltmeter lower limit red arc (volts)	8-11
Voltmeter caution range yellow arc (volts)	11-12.5
Voltmeter green arc (volts)	**12.5-16**
Voltmeter upper limit red line (volts)	16.1

Fuel

Approved fuel grade	100LL
Usable fuel (US gal.)	**24.0**
Fuel tank capacity (US gal.)	24.5

Weight and Balance

Max. ramp weight (lbs)	1770
Max. takeoff weight (lbs)	**1764**
Max. landing weight (lbs)	1764
Forward CG limit (at or below 1653 lbs)	7.95
Forward CG limit (1764 lbs)	8.07
Aft CG limit (1764 lbs)	12.16
Aft CG limit (at or below 1653 lbs)	12.48
Max. weight in baggage compartment (lbs)	44

Power Plant Operation

Min. idle mixture rise leaned to peak (runup/shutdown)	50
Min. rpm during engine runup idle check	975
Min. rpm for in-flight (area) idle beyond gliding range of a runway	**1400**
Min. rpm operations with fuel pump off	**1400**
Min. permissible static rpm (full throttle runup)	2000
Tachometer normal operating range (rpm)	700-2800
Max. permissible continuous rpm	**2800**
Min. rpm drop during magneto check	25
Max. rpm drop during magneto check	150
Max. rpm drop difference between magnetos	50
Max. permissible continuous bhp	125
Min. oil pressure (psi)	10
Oil pressure normal operating range (psi)	**30-60**
Max. time for oil pressure to reach 10 psi after start (secs.)	**30**
Max. oil pressure for full power operation if OAT < 0°C (psi)	70
Max. oil pressure (psi)	**100**
Min. oil temperature (°F)	75
Max. rpm after start until oil temp indication registers	**1000**
Oil temperature normal operating range (°F)	**170-220**
Min oil temp. to begin an area SFL at Area Idle (°F)	**170**
Min. oil temp for full power operation if oil pressure norm (°F)	100
Max. oil temperature (°F)	240
Min. oil quantity (US qts)	**4**
Max. oil quantity (US qts)	**6**
Fuel pressure lower limit red line (psi)	3.5
Fuel pressure upper limit red line (psi)	16.5
Max. continuous starter operation (secs.)	**10**
Max. cumulative starter op. before cooling 3-5min. (secs.)	**30**
Max. time for CHT below 300°F in descent (minutes)	5
Min. CHT (°F) takeoff & descent	240
CHT normal operating range (°F)	300-420
CHT caution range (°F)	420-460
Max. CHT (°F)	460
Max. OAT (°C) operation w/ full winterization kit	0
Max. OAT (°C) operation w/ partial winterization kit	12.5

Takeoff & Landing

Max. total wind student dual (kts)	**25**
Max. total wind student solo (kts)	**20**
DA20 max. demonstrated crosswind component (kts)	**20**
Max. crosswind component student dual (kts)	15
Max. crosswind component student solo (kts)	**10**
Max. tailwind component (kts)	**5**

Misc.

Maximum airplane structural temperature (°C)	55
Propeller approx. minimum ground clearance (inches)	10
Main landing gear tire pressure (psi)	33
Nose gear tire pressure (psi)	26
Min. OAT (°C) cabin heat not req for 10 min. before T/O	-20

Items in **red** must be committed to memory

16-Dec-10