

PREFLIGHT

CONTROLS Check free movement
UNDERCARRIAGE Brake fluid and tire PSI
.....(main 22 & tail 35)
PROP Turn prop 10 times
(open 3 oil drain valves on bottom cylinders, then close to
vertical position)
OIL Check level 12-14 liters & cap secure
..... open TOP engine shutter
.....oil cooler no obstruction
FUEL 2 drains
..... (check level, vents clear, caps secure)
ALL Covers and locks removed
..... aft battery switch on
..... start air pressure above 25 on gauge

PRESTART

PropForward
Mix - Rich
Oil & Engine shutters Open
Fuel gauges Check
Fuel valve L or R
PrimerUnlock (prime 3-4 shots)
Throttle Open 1/2 inch (1000 RPM)
Switches Bottom 6 On (Bat, Gen, Starter, Instruments,
Beacon)
Air Valve Open
Start Push
Mags On (1+2) after prop turning 4 times
Switches Top 5 On
Oil14 mPa (20 seconds after start)
Primer Locked in

RUNUP

1300 RPM until CHT 100°C & OIL 30°C
1600 RPM check GENERATOR (28 volts)
1860 RPM check MAGS (drop 60 RPM) & Carb Heat
2000 RPM exercise PROP (1400 RPM - 3 times)
Prop reduce RPM to 1860
..... (move Throttle - RPM constant)
Throttle 680 mm Hg
..... (Prop - Forward)
..... check instruments green
Prop reduce RPM to 2050
..... (check instruments green)
Throttle Idle (Prop - Forward)
Throttle Full open and close within 6 seconds

PRETAKEOFF

RECIT.CIGAR.WUFTDM (radios, electrics, controls,
inside, trim, cowls, instruments, gas, altimeter, runup,
wind, undercarriage, flaps, time, dg, mixture)

ENGINE TAKE OFF

Throttle Full Open
Prop 2350 RPM (5 min)
Prop 2050 RPM (at 500 feet)

ENGINE CRUISE

Full Throttle & 2050 RPM(max continuous)
680 mm Hg & 1860 RPM (75% power)
630 mm Hg & 1730 RPM (60% power)
Engine shutters 140°C-210°C (230°C max)
Oil shutters 50°C-65°C (75°C max)
Mixture adjust (monitor CHT)

SHUTDOWN

Avionics Off
700 RPM 2 minutes
2000 RPM 20 seconds
700 RPM
Mags Off
Throttle Full open (closed after prop stops)
Switches Off
Fuel valve Closed
Air valve Closed
Pneumatic dehydrator Drain (bottom right of engine)

INFORMATION

Takeoff distance (21* flap) 200 meters
Landing distance (44* flap, 3 point landing) .. 200 meters
Gross weight 2866 pounds
Empty weight 2156 pounds
Baggage area 66 pounds max
Usable fuel . 22+22 US Gal (170 Liters) (min 91 Octane)
Fuel flow 14-22 GPH (50-85 LPH) // average is 60 LPH.
Oil capacity 23 liters // average consumption 1 LPH
Engine type AI-14RA (251 HP)
Aircraft serial no -..... CF21940944
Length - 27' // Span - 37' // Height - 10'
Dive speed 110 kts (MP not under 330 mm Hg)
EMERGENCY fuel pump on
..... check fuel PSI, switch tanks

V SPEEDS - WILGA

V_r (21*) 48 kts
V_x (21*) 51 kts
V_x (44*) 49 kts
V_y (0*) 62 kts
V_a 93 kts
V_{fe} 80 kts
V_{ref} (44*) 67 kts
V_s (0*) 57 kts
V_{so} (44*) 51 kts
V_{parachute} ... 60-80 kts