



**PREFLIGHT INSPECTION**

DOORS	SECURE from WIND
DOCUMENTS & POH	ON BOARD
LANDING GEAR LEVER	DOWN
CONTROL WHEEL LOCK	REMOVE
IGNITION SWITCH	OFF
AVIONICS POWER SWITCH	OFF
MASTER SWITCH	ON
STALL WARNING VANE	CHECK (LEFT WING)
FLAPS	EXTEND
FUEL SELECTOR VALVE	ON FULLER TANK/CHECK FUEL QTY
MASTER SWITCH	OFF
TRIM	NEUTRAL
ALTERNATE STATIC	OFF
STATIC SOURCE	CHECK NO BLOCKAGE
BAGGAGE DOOR	CHECK SECURE
<b>EMPENNAGE</b>	
RUGGER GUST LOCK	REMOVE
TAIL TIE DOWN	DISCONNECT
CONTROL SERVICES	CHECK freedom of movement and security
<b>RIGHT WING Trailing Edge</b>	
AILERON	CHECK freedom of movement and security
AILERON GAP SEAL	CHECK security and fit
FUEL TANK VENT	CHECK for stoppage
<b>RIGHT WING</b>	
WING TIE DOWN	DISCONNECT
MAIN WHEEL TIRE	CHECK
FUEL DRAIN	CHECK
FUEL QUANTITY	VISUALLY CHECK
FUEL FILLER CAP	SECURE
<b>NOSE</b>	
PROPELLER AND SPINNER	CHECK for nicks, security and oil leaks
LANDING and TAXI LIGHTS	CHECK
NOSE GEAR DOORS	SECURE
NOSE WHEEL STRUT and TIRE	CHECK for INFLATION
ENGINE OIL LEVEL	7.5 - 8.5 quarts 9.5 - 10 quarts over 2hr flight
STRAINER / DRAINS	CHECK for WATER
<b>LEFT WING</b>	
MAIN WHEEL TIRE	CHECK
FUEL DRAIN	CHECK
FUEL QUANTITY	VISUALLY CHECK
FUEL FILLER CAP	SECURE
<b>LEFT WING Leading Edge</b>	
PITOT TUBE COVER	REMOVE and CHECK
WING TIE DOWN	DISCONNECT
<b>LEFT WING Trailing Edge</b>	
FUEL TANK VENT	CHECK for stoppage
AILERON	CHECK freedom/secure
AILERON GAP SEAL	CHECK security and fit

**BEFORE STARTING ENGINE**

PREFLIGHT INSPECTION	COMPLETE
SEATS and BELTS	ADJUST and LOCK
BRAKES	TEST and SET
COWL FLAPS	OPEN
AVIONICS	OFF
AUTOPILOT	OFF
LANDING GEAR LEVER	DOWN
MASTER SWITCH	ON
LANDING GEAR LIGHT and HORN	PRESS TO TEST
CIRCUIT BREAKERS	IN
FUEL SELECTOR VALVE	FULLER TANK
FLAPS	UP

**STARTING ENGINE**

MIXTURE	RICH
PROPELLOR	HIGH RPM
THROTTLE	CLOSED
AUX FUEL PUMP	ON
THROTTLE	ADVANCE to obtain 50-60 lbs/hr fuel flow (25-35 if hot) then RETURN to IDLE POSITION
AUX FUEL PUMP	OFF
PROPELLOR AREA	CLEAR
IGNITION SWITCH	START
THROTTLE	ADVANCE slowly
IGNITION SWITCH	RELEASE when engine starts
THROTTLE	1000RPM
OIL PRESSURE	CHECK
LOW VOLTAGE LIGHT	OFF

**RUNUPS**

PARKING BRAKE	SET
CABIN DOORS and WINDOWS	CLOSED and LOCKED
COWL FLAPS	FULL OPEN
FLIGHT CONTROLS	FREE and CORRECT
FLIGHT INSTRUMENTS	CHECK
FUEL SELECTOR VALVE	FULLER TANK
MIXTURE	RICH
ELEVATOR and RUDDER TRIM	TAKEOFF
THROTTLE	1700RPM
L & R MAGENTOS DROP	Should not exceed 150rpm or 50 diff.
PROPELLOR	CYCLE x 3, rpm/man/oil
SUCTION	IN GREEN
THROTTLE	1000RPM
RADIOS	SET
AUTOPILOT	OFF
LIGHTS	ON AS REQUIRED
PARKING BRAKE	RELEASE



TAKE OFF	
<b>NORMAL TAKEOFF</b>	
WING FLAPS	0-10 degrees (10 pref)
POWER	FULL - 2850RPM
ELEVATOR CONTROL	LIFT NOSE 75 KIAS
CLIMB	90 KIAS
BRAKES	APPLY momentarily
LANDING GEAR	RETRACT
WING FLAPS	RETRACT
<b>SHORT FIELD TAKEOFF</b>	
WING FLAPS	10 degrees
BRAKES	APPLY
POWER	FULL 2850RPM
BRAKES	RELEASE
ELEVATOR	SLIGHT TAIL LOW
CLIMB SPEED	69 KIAS
LANDING GEAR	RETRACT
WING FLAPS	RETRACT over 80 KIAS
NOTE	DO NOT reduce power until wing flaps and gear has been retracted

LANDING	
<b>NORMAL LANDING</b>	
AIRSPEED	80-90 KIAS (flaps up)
WING FLAPS	FLAPS down preferred
AIRSPEED	70-80 KIAS (flaps down)
ELEVATOR TRIM	ADJUST
TOUCHDOWN	MAIN WHEELS first
LANDING ROLL	LOW NOSE GENTLY
BRAKING	MINIMUM REQUIRED
<b>SHORT FIELD LANDING</b>	
WING FLAPS	FULL DOWN
AIRSPEED	72 KIAS
ELEVATOR TRIM	ADJUST
POWER	REDUCE to idle after clearing obstacle
TOUCHDOWN	MAIN WHEELS first
BRAKES	APPLY FIRMLY
WING FLAPS	RETRACT
<b>BALKED LANDING</b>	
POWER	FULL - 2850RPM
WING FLAPS	RETRACT to 20 degrees immediately
CLIMB SPEED	70 KIAS until obstacle cleared
MIXTURE	RICH
WING FLAPS	RETRACT slowly after safe altitude and 75-80 KIAS
COWL FLAPS	OPEN
<b>AFTER LANDING</b>	
WING FLAPS	RETRACT
COWL FLAPS	OPEN

ENROUTE CLIMB	
<b>NORMAL CLIMB</b>	
AIRSPEED	100-110 KIAS
POWER	25hg/2550rpm
MIXTURE	LEAN to 70 litres /hr
COWL FLAPS	OPEN as required
<b>MAX PERFORMANCE CLIMB</b>	
AIRSPEED	96 KIAS at SL
POWER	FULL 2700 RPM
MIXTURE	LEAN per FUEL CARD
COWL FLAPS	FULL OPEN
<b>CRUISE</b>	
POWER	15-25 INCHES HG 2200-2550 no more than 75%
ELEVATOR and RUDDER trim	ADJUST
MIXTURE	LEAN for CRUISE EIS
COWL FLAPS	CLOSED
<b>DESCENT</b>	
POWER	AS DESIRED
MIXTURE	ADJUST for smooth ops
COWL FLAPS	CLOSED
<b>BEFORE LANDING</b>	
SEATS, BELTS	SECURE
FUEL SELECTOR	FULLER TANK
LANDING GEAR	EXTEND below 165KIAS
LANDING GEAR	DOWN AND GREEN
MIXTURE	RICH
PROPELLOR	HIGH RPM
WING FLAPS	AS DESIRED
0-10 degrees below 150 KIAS, 10-30 degrees below 115 KIAS	
AUTOPILOT	OFF
ELEVATOR TRIM	ADJUST

SECURING AIRPLANE	
PARKING BRAKE	SET
AVIONICS POWER SWITCH	OFF
MIXTURE	IDLE CUT OFF
IGNITION SWITCH	OFF
CONTROL LOCK	INSTALL

V Speeds	
VA 1723kg	125 KIAS
VA 1429kg	113 KIAS
VA 1134kg	101 KIAS
VFE 10 degrees	150 KIAS
VFE 10 - 30 degrees	115 KIAS
VLE Max Landing Gear Extended Speed	200 KIAS
VLO Max Landing Gear Op SPEED	165 KIAS
VNO Max Structural Cruising SPEED	165 KIAS
VNE Never Exceed SPEED	200 KIAS
VS	69 KIAS
VS0	57 KIAS
VX	79 KIAS
VY	96 KIAS
VG 1723kg	85 KIAS
VG 1542kg	80 KIAS
VG 1361kg	75 KIAS