

**PREFLIGHT**

1	a	Ignition and master Switches	OFF
	b	Landing gear selector	DOWN
	c	Mixture Controls	IDLE CUTOFF
	d	Avionics Master Switch	OFF
	e	Master switch	ON
	f	Fuel quantity	CHECK
	g	Gear position indicator lights	CHECK
	h	If required – lights and de-ice equipment	CHECK
	i	Master switch	OFF
	j	Cowl flaps	OPEN
	k	Wing flaps	UP
	l	Trim Tabs	TAKEOFF
	m	Pitot and static systems	DRAIN
	n	Crossfeed drains	DRAIN
	o	Crossfeed drains	CLOSE
2	a	Right wing, control surfaces, tip	CHECK
	b	Snow, frost, ice on wing / control surfaces	ABSENT
	c	Right fuel quantity	CHECK
	d	Right fuel cap	SECURE
	e	Right leading edge	INSPECT
	f	Right fuel drains	DRAIN
	g	Right fuel tank vent free of obstructions	CHECK
	h	Right cowl flap should be open	CHECK
	i	Right prop, spinner and air inlets	CHECK
	j	Right engine oil min 6,5 qts	CHECK
	k	Right main gear, Tires inflated properly	CHECK
3	a	Nose section	INSPECT
	b	Nose gear and landing lights	CHECK
	c	Forward baggage door	SECURE
4	a	Windshield free of defects and clean	CHECK
	b	Towbar and control locks detached	CHECK
5	a	Left main gear, Tires inflated properly	CHECK
	b	Left engine oil min 6,5 qts	CHECK
	c	Left prop, spinner and air inlets	CHECK
	d	Left cowl flap should be open	CHECK



	e	Left fuel tank vent free of obstructions	CHECK
	f	Left fuel drains	DRAIN
	g	Left leading edge	INSPECT
	h	Pitot mast unobstructed	CHECK
	l	Lift detector	INSPECT
	m	Left fuel quantity	CHECK
	n	Left fuel cap	SECURE
	o	Snow, frost, ice on wing / control surfaces	ABSENT
	p	Right wing, control surfaces, tip	CHECK
	q	Antennas	CHECK
	r	Rear cabin doors closed and locked	CHECK
	s	Baggage Doors	SECURED
	t	Left static source unobstructed	CHECK
	u	Fuselage and vertical stabiliser	CHECK
	v	Stabilisator free, trim tab neutral	CHECK
	w	Heater and fresh air inlet	CHECK
	x	Right static source unobstructed	CHECK

BEFORE STARTING ENGINES

1	Baggage	SECURE
2	Weight and Balance	COMPUTED
3	Performance	COMPUTED
4	Aircraft papers	IN ORDER
5	Maps and charts	CHECK
6	Cabin door	LOCKED
7	Seat Belts	SECURED
8	Crew Seats	ADJUSTED
9	Parking Brake	SET
10	Cowl flaps	OPEN
11	Altimeter	SET
12	Controls	FREE & OK
13	Oxygen pressure	CHECK
14	Fuel valves	ON
15	Circuit breakers	CHECK
16	Switches	OFF

**STARTING ENGINES**

Make sure all radio switches, light switches and pitot heat switch are in the OFF position before starting engine

1	Fuel selectors	ON
2	Mixture	FULL FORWARD
3	Prop control	FULL FORWARD
4	Battery switch	ON
5	Alternators	ON
6	Magneto switches	ON
7	Auxiliary fuel pumps	OFF
8	Recognition light	ON if required
	FIRST ENGINE	
1	Primer	4-12 sec
2	Throttle	CLOSED
3	Prop area	CLEAR
4	Starter	ENGAGE
5	Additional priming	IF REQUIRED
6	Oil pressure	CHECK
7	Warm up	1000-1200 RPM
	SECOND ENGINE	
	Same procedure as for first	

STARTING ENGINES WHEN HOT :

1	Master switch	ON
2	Magneto switches	ON
3	Fuel pumps	OFF
4	Throttle	1/2" OPEN
5	Mixture controls	IDLE CUTOFF
6	Propellers	CLEAR
7	Starters	ENGAGE
8	Mixture when engine fires	FULL RICH
9	Oil pressure	CHECK

**STARTING ENGINES WHEN FLOODED :**

1	Master switch	ON
2	Magneto switches	ON
3	Fuel pumps	OFF
4	Throttle	FULL OPEN
5	Mixture controls	IDLE CUTOFF
6	Propellers	CLEAR
7	Starters	ENGAGE
8	Retard throttle, when engine fires, mixture	ADVANCE
9	Oil pressure	CHECK

PRE TAXI and TAXI

1	Avionics master switch	ON
2	Alternators	CHECK
3	Gyro suction	CHECK
4	Engine instruments	CHECK
5	Autopilot	TEST
6	Annunciator panel	TEST
7	Flight controls	CHECK
8	Wing flaps	CHECK UP
9	Trim	TEST & SET
10	Parking Brake	OFF
11	Brake Operation	CHECK
12	Lights	AS REQUIRED
13	Flight instruments	OPERATING
14	Warm Up 1000 - 1400 RPM	2 - 4 MINUTES
15	Oil temperature for full power more than	60° F

PRE TAKEOFF

1	a	Parking Brake	ON
	b	Fuel selectors	ON
	c	Mixture controls	FORWARD
	d	Throttles	1000 RPM
	e	Prop controls FEATHER	CHECK
2	a	Prop controls	FORWARD



b	Throttle controls	2300 RPM
c	Prop controls GOVERNOR	CHECK
d	Alternate air	ON - OFF
3	a Prop controls	FORWARD
b	Throttle controls	2000 RPM
c	Magnetos check Maximum drop	175 RPM
	. Maximum differential drop	50 RPM
d	Throttle controls	1000 RPM
e	Engine gauges	CHECK
f	Auxiliary fuel pump	OFF
	. check feather, maximum decrease	500 RPM
4	Lights	AS REQUIRED
5	Pitot heat	AS REQUIRED
6	Transponder	STANDBY
7	Trim Tabs	SET TAKEOFF
8	Gyro pressure	4,8 - 5,1 in Hg
9	Directional gyro	SET
10	Turn and bank	OPERATING
11	Altimeter	SET
12	Clock	WIND and SET
13	Alternator outputs	CHECK
14	Fuel pumps	ON
15	Door	LOCKED

TAKEOFF and CLIMB

1	Parking Brake	OFF
2	Mixture controls	FORWARD
3	Propeller controls	FORWARD
4	Throttle controls	FORWARD
5	Takeoff power 40 in max	2800 RPM
6	Accelerate and rotate at	80 KT
7	Accelerate to best rate of climb	92 KT
8	Brakes	APPLY
9	Landing gear	RETRACT
10	Climb Power (400 ft AGL)	SET
11	Fuel Pump (one at a time)	OFF
12	Cowl flaps	AS REQUIRED
13	Oxygen	AS REQUIRED

**CRUISE**

1	Fuel pumps	OFF
2	Power initially 27 in / 2350 RPM	SET
3	Mixture lean	AS REQUIRED
a	select desired RPM and MP	
b	adjust for peak EGT	
c	increase fuel mixture and lower EGT by	175? from peak
4	Cowl flaps	SET
5	Fuel valves	ON
6	Engine gauges	CHECK

APPROACH and LANDING

1	Oxygen	OFF
2	Seat Belts	FASTENED
3	Fuel pumps	ON
4	a Power reduce max	1 in per min
b	Mixture controls move forward	SLOW
5	Fuel valves	ON FULLEST
6	a Landing Lights	ON
b	Landing gear extend below	130 KT
7	Propellers	SET
8	Cowl flaps	AS REQUIRED
9	Flaps	SET
a	¼ flaps below	141 KT
b	½ flaps below	122 KT
c	Full flaps below	115 KT
10	a Heater (if used)	OFF
b	Heater fan	ON
11	a Prop controls	HIGH RPM
b	Mixture controls	FORWARD
v	Landing gear check 3 green	DOWN

**POST LANDING**

1	Landing lights	OFF
2	Anti Ice	OFF
3	Pitot heat	OFF
4	Transponder and Radar	OFF
5	Wing flaps	RETRACT
6	Cowl flaps	OPEN
7	Fuel pumps	OFF
8	Propeller controls	FORWARD

SHUT DOWN

1	Radio and electric equipment	OFF
2	Heater Fan (if used)	OFF
3	Mixture controls	IDLE CUTOFF
4	Magneto switches	OFF
5	Master switch	OFF
6	Parking brake	ON
7	Alternators	OFF

IMPORTANT WEIGHTS AND DATA

	Lbs	kg
Maximum Ramp Weight	4407	1999
Maximum Takeoff Weight	4407	1999
Maximum Landing Weight	4407	1999
Maximum Zero Fuel Weight	4430	2010
Basic Empty Weight	3332	1511
Useable Fuel	738	= 123 US GAL = 465 Liter
Max crosswind component	17 KTS	

**LIMITATIONS**

		KIAS
Vne	Never Exceed Speed	205
Vno	Maximum Structural Cruising Speed	166
Va	Maneuvering Speed 1999kg – 1457kg	135-114
Vfe	Flap extend speed full	115
Vle	Max Gear Extension / Extended Speed	130
Vlo	Max Gear Retraction Speed	108
Vmca	Minimum Single Eng. Air Control Speed	66
Vs	Stall Speed Clean	63
Vso	Stall Speed Landing Configuration	61
Vy	Best Rate of Climb Speed	89
Vx	Best Angle of Climb Speed	76
Vyse	Single Engine Best Rate of Climb Speed	92
Vxse	Single Engine Best Angle of Climb Speed	78
	Single engine Final Approach Speed	83

SINGLE ENGINE OPERATION

1	Dead Foot = Dead Engine	IDENTIFY
2	Attitude	MAINTAIN
3	Airspeed keep minimum	92 KT
4	Landing Gear and Flaps	UP
5	Throttle dead engine	IDLE
6	Propeller	FEATHER
7	Power operating engine	SET MAX
6	SECURE ENGINE	
a	Mixture	CUTOFF
b	Fuel selector	OFF
c	Fuel pump	OFF
d	Magneto	OFF
e	Alternator Switch	OFF
f	Cowl Flap	CLOSE