

AIRCRAFT PREPARATION COMPLETED (ACCORDING AFM)

PREFLIGHT CHECK

1. Outside check	COMPLETED.....	1
2. Aircraft papers.....	CHECKED	2
3. Aircraft log & Hold Item List	CHECKED	3
4. Tow bar	REMOVED & SECURED.....	4
5. Cabin.....	CHECKED	5
6. Loadsheets.....	WITHIN LIMITS.....	6

PREFLIGHT CHECK COMPLETED

CHECK BEFORE ENGINE START

1 Seats.....	ADJUSTED & LOCKED.....	1
2 Parking brake.....	SET	2
3 Seat belts & harness.....	FASTENED.....	3
4 Circuit breakers.....	CHECKED	4
5 Equipment switches.....	OFF, EXCEPT TCU	5
6 Battery & alternator 2	ON, TCU & RAL CHECKED	6
7 Annunciator lights	TEST	7
8 EMS	ON AND READY.....	8
9 Fuel quantity	L+R, ENDURANCE	9
10 Fuel selector	FULLER TANK.....	10
11 PFD & Backup instrument	ON, PRESS CONTINUE (2x)	11
12 Carburettor heat.....	OFF	12
13 Throttle.....	FREE MOVEMENT / IDLE.....	13
14 Canopy.....	CLOSED & LOCKED	14

CHECK BEFORE ENGINE START COMPLETED

ENGINE START

1 Navigation lights.....	ON.....	1
2 Ignition key	INSERT	2
3 Choke.....	pull for cold start	3
4 Throttle.....	idle / 1 cm if choke is not used.....	4
5 Aux fuel pump	ON.....	5
6 Ignition switch	BOTH	6
7 Propeller area	CLEAR.....	7
8 Starter	ENGAGE (max. 10").....	8
9 Throttle.....	SET 2000 RPM.....	9
10 Oil pressure.....	CHECKED	10
11 Choke.....	OFF	11

ENGINE START COMPLETED

CHECK AFTER ENGINE START

1	EMS	BATTERY CHARGING	1
2	Aux fuel pump	OFF, PRESSURE CHECKED	2
3	Avionics switches 1 & 2	ON (check ATIS)	3
4	Ventilation Heater, Defroster	AS REQUIRED	4
5	Fuel selector	SWITCH TANK	5
6	Flaps	UP	6
7	Flight instruments & Avionics	SET & CHECKED	7
8	Engine instruments	CHECKED	8

CHECK AFTER ENGINE START COMPLETED

TAXI CHECK

1.	Brakes & steering	CHECKED	1
2.	Flight instruments	CHECKED	2

TAXI CHECK COMPLETED

RUN UP

1	Parking brake	SET	1
2	Warm up	OIL TEMP > 50°C	2
3	Zone behind aircraft	CLEAR	3
4	Fuel selector	FULLER TANK	4
5	Aux fuel pump	ON	5
6	Throttle	SET 4000 RPM	6
7	Magnetos (L-B-R-L-B)	CHECKED (< -300RPM , Δ<150RPM)	7
8	Carburettor heat	CHECK	8
9	Aux fuel pump	OFF, CHECK PRESS, ON	9
10	Throttle	MAX CONT. POWER, > 4700 RPM	10
11	Throttle	FULL PWR, > 5200 RPM	11
12	Engine instruments	CHECKED	12
13	Throttle idle	CHECKED (< 1900 RPM)	13
14	Throttle	SET 2000 RPM	14

RUN UP COMPLETED

CHECK BEFORE DEPARTURE

1	Aux fuel pump	ON	1
2	Fuel quantity	L+R, ENDURANCE	2
3	Fuel selector	FULLER TANK	3
4	Carburetor heat	OFF	4
5	Ignition	BOTH	5
6	Trim	SET FOR DEPARTURE	6
7	Flaps	T/O	7
8	Avionics	SET FOR DEPARTURE	8
9	Seat position	CHECKED & LOCKED	9
10	Cabin and pax	SECURED	10
11	Flight controls	FREE & CORRECT	11
12	Departure briefing	COMPLETED	12

CHECK BEFORE DEPARTURE COMPLETED

LINE UP CHECK

- | | | | |
|---|-------------------------------|-----------------------|---|
| 1 | Canopy..... | CLOSED & LOCKED | 1 |
| 2 | Time | NOTED | 2 |
| 3 | Transponder..... | ALT | 3 |
| 4 | Approach sector & runway..... | CLEAR..... | 4 |
| 5 | Landing light..... | ON..... | 5 |
| 6 | Strobe light..... | ON..... | 6 |

LINE UP CHECK COMPLETED

CLIMB CHECK

- | | | | |
|----|---------------------|-----------------------------|---|
| 1. | Flaps | UP | 1 |
| 2. | Climb power | SET | 2 |
| 3. | Aux fuel pump | OFF, PRESSURE CHECKED | 3 |

CLIMB CHECK COMPLETED

CRUISE CHECK

- | | | | |
|---|--------------------------|--------------------------|---|
| 1 | Altimeter..... | CHECKED (STD / QNH)..... | 1 |
| 2 | Cruise power..... | SET | 2 |
| 3 | Engine instruments | CHECKED | 3 |
| 4 | Fuel quantity | L+R, ENDURANCE | 4 |
| 5 | Fuel selector | AS REQUIRED | 5 |

CRUISE CHECK COMPLETED

DESCENT CHECK

- | | | | |
|---|------------------------------|---------------------|---|
| 1 | ATIS or AD information | NOTED | 1 |
| 2 | Approach briefing..... | COMPLETED..... | 2 |
| 3 | Avionics..... | SET & CHECKED | 3 |
| 4 | Circuit breakers..... | ALL IN | 4 |
| 5 | Cabin & pax | SECURED | 5 |

DESCENT CHECK COMPLETED

APPROACH CHECK

- | | | | |
|---|-----------------------|--------------------------|---|
| 1 | Altimeter..... | QNH SET | 1 |
| 2 | Aux fuel pump | ON, CHECK PRESSURE | 2 |
| 3 | Fuel quantity | L+R, ENDURANCE | 3 |
| 4 | Fuel selector | FULLER TANK..... | 4 |
| 5 | Carburettor heat..... | AS REQUIRED | 5 |

APPROACH CHECK COMPLETED

LANDING CHECK

- | | | | |
|---|-----------------------|-----------------------|---|
| 1 | Flaps | SET FOR LANDING | 1 |
| 2 | Carburetor heat | OFF (or TO GO) | 2 |

LANDING CHECK COMPLETED

AFTER LANDING CHECK

- | | | | |
|---|---------------------|-------------|---|
| 1 | Aux fuel pump | OFF | 1 |
| 2 | Landing Light | OFF | 2 |
| 3 | Strobe light | OFF | 3 |
| 4 | Flaps | UP | 4 |
| 5 | Time | NOTED | 5 |

AFTER LANDING CHECK COMPLETED

ENGINE SHUT DOWN AND PARKING

- | | | | |
|----|------------------------------|-------------------------------------|----|
| 1 | Parking brake | SET | 1 |
| 2 | Throttle | IDLE | 2 |
| 3 | 121.500 | CHECKED | 3 |
| 4 | Avionics 1 & 2 | OFF | 4 |
| 5 | Electrical consumers | OFF | 5 |
| 6 | Flaps | LD | 6 |
| 7 | Ignition (after 2 min) | R, after 10" OFF, key removed | 7 |
| 8 | Battery & alternator 2 | OFF | 8 |
| 9 | Backup instrument | OFF | 9 |
| 10 | Parking brake | AS REQUIRED | 10 |
| 11 | Flight data | NOTED | 11 |

PARKING CHECK COMPLETED

SPEEDS

V_{ROTATE}	55 KIAS	$V_{initial\ approach}$	90 / 85 KIAS
$V_{X, 10^\circ}$	63 KIAS	$V_{FE 10^\circ}$ (flaps T/O)	105 KIAS
$V_{Y, 10^\circ}$	63 KIAS	$V_{FE 20^\circ}$ (flaps APP)	95 KIAS
$V_{X, 0^\circ}$	65 KIAS	$V_{FE 30^\circ}$ (flaps LD)	85 KIAS
$V_{Y, 0^\circ}$	68 KIAS	V_{REF} (flaps LD setting)	55 KIAS
V_A (maneuvering speed)	105 KIAS	$V_{FINAL} = V_{REF LD} + 5$	60 KIAS
$V_{best\ glide\ angle}$	65 KIAS	Demo. Crosswind component	19 kt

Wind increments on Final: for wind ≥ 10 kts, add 1/3 of headwind comp or full wind gust spread, whichever is higher, to V_{final}

Approach speeds for different Flaps settings

Flap setting	UP	T/O	APP	LD
V_{FE} [KIAS]	N/A	105	95	85
V_{REF} [KIAS] ($V_{FINAL} = V_{REF} + 5$)	65 (70)	63 (68)	57 (62)	55 (60)
Landing distance [m] (15m obst.)	585	560	495	475
Landing run [m]	305	285	245	225

CRUISE SPEED

Data provided for ISA condition

ISA	ISA T°	RPM	IASa	TAS	Cons.	Range 140l - 45min
[ft]	°C	[min-1]	[kt]	[kt]	[l/h]	Nmi
2000	11	4500	84	89	21	533
		4800	93	97	25	479
		5000	98	102	27	450
		5500	112	115	34	393
4000	7	4500	84	92	19	619
		4800	93	100	23	546
		5000	98	105	25	508
		5500	112	118	31	437
6000	3	4500	84	95	17	727
		4800	93	103	20	628
		5000	98	108	23	578
		5500	112	122	29	488
8000	-1	4500	84	97	15	868
		4800	93	106	18	729
		5000	98	112	21	664
		5500	112	126	27	548
10000	-5	4500	84	101	12	1058
		4800	93	110	16	859
		5000	98	115	19	769
		5500	112	130	25	620

*add or subtract 500ft on altitude for each 5°C above or below ISA T°

Traffic Circuit

