PREFLIGHT CHECK

1	Aircraft preparation / outside check	COMPLETED (according AFM)	1
2	Baggage and rear door	CLOSED and LATCHED	2
3	Tow bar	REMOVED & SECURED	3
4	Cabin	CHECKED	4
5	Aircraft papers & aircraft log	CHECKED	5
6	Load sheet	WITHIN LIMITS	6

PREFLIGHT CHECK COMPLETED

COCKPIT PREPARATION

1	Parking brake	SET	1
2	Rudder pedals	ADJUSTED & LOCKED	2
3	Seat belts & harness	FASTENED	3
4	Fuel selectors (2)	ON	4
5	Power lever (2)	CHECKED / IDLE	5
6	Alternate air	CLOSED	6
7	Manual gear extension handle	PUSHED	7
8	Gear selector	DOWN	8
9	Avionic master	OFF	9
10	Electric master	OFF	10
11	Engine masters (2)	OFF	11
12	Start key	OUT	12
13	Pitot heat	OFF	13
14	Alternate static	CLOSED	14
15	Alternators (2)	ON	15
16	VOTER switches (2)	AUTO	16
17	All light	OFF	17
18	Emergency switch	OFF / GUARDED	18
19	ELT	ARMED	19
20	Circuit breakers	CHECKED	20
21	Flaps	UP	21
22	Fuel pumps (2)	OFF	22

COCKPIT PREPARATION COMPLETED

CHECK BEFORE ENGINES START

1 Electric master ..... ON 1
2 Gear warning & fire detector ..... TESTED 2
3 Trims ..... CHECKED 3

- Check pitch trim manually for free movement forward and rearward set back to neutral
- Check rudder trim in neutral position

4 Flight controls ..... FREE 4

- Check that no object is potentially blocking the free movement of the flight controls also no objects near or behind the pedals

5 Variable elevator backstop ..... CHECKED 5

- Hold yoke in full aft position, set power levers to MAX, verify yoke moves forward, set power levers to idle, verify yoke regain free full movement aft

6 G1000 ..... DATA CHECKED / ACKNOWLEDGE 6

- Check the validity of the data base required for the flight press “ENT” (right button of MFD)

7 Annunciations / engine instrument ..... CHECKED 7

- Check PFD warnings for congruency, choose engine page on MFD and verify function of engines instruments

8 Fuel quantity ..... CHECKED / RESET (if required) 8
9 Fuel temperature ..... CHECKED 9
10 Rear door ..... CLOSED & LATCHED 10
11 Front canopy ..... POSITION 1 or 2 11

CHECK BEFORE ENGINES START COMPLETED

ENGINES START

1	Strobe light	ON	1
2	Start key	INSERT	2
3	Power levers (2)	IDLE	3

Start one engine at a time, normal sequence: first start LH engine

4	Engine master	ON	4
5	Annunciation / engine instruments	CHECK	5
6	Glow annunciation	OFF	6
7	Propeller area	CLEAR	7
8	Start key	ON (release when engine started)	8

- Starter limitation: do not operate the starter for more than 10 seconds. Let it cool off for 60 seconds before attempting subsequent start

9	Oil pressure	CHECK (out of red within 3 seconds)	9

- If the oil pressure has not moved from the red range within 3 seconds after engine start, set engine master OFF and investigate the problem

10	Annunciations / engine / system page	CHECK	10
11	IDLE RPM 710 ± 30	CHECK	11
12	Voltage, electrical load	CHECK	12

Start RH engine, repeat sequence 4 to 12

ENGINES START COMPLETED

CHECK AFTER ENGINES START

1 Annunciations ..... CHECK 1
2 Fuel selectors (2) ..... X-FEED 2
3 De-ice ANNUN-TEST ..... AS REQUIRED (ON / time check) 3
4 Avionics master ..... ON 4
5 Flood light ..... AS REQUIRED 5
6 Position light ..... ON 6
7 Ammeter ..... CHECK 7
8 Flaps ..... UP - APP - LDG - APP (or UP) 8
9 Pitot heat ..... CHECK 9

- Set pitot heat ON, verify “STAL HT FAIL” on PFD, set pitot heat OFF

10 Cabin heat & defroster ..... AS REQUIRED 10
11 Flight instruments ..... SET & CHECK 11

- Check for correct indication and no flags, set actual QNH and appropriate speeds. Note: HSI might need distance to hangar or fuel station for proper function
- Check STBY instruments set QNH and compare

12 Autopilot / trim ..... TEST 12

- Autopilot: switch on autopilot, verify engaged, switch off autopilot with yoke disconnect button on the yoke, verify disconnection, switch off FD if present
- Trim: verify trim function UP / DN, verify disconnect function with yoke disconnect button

13 Engine temperature ..... CHECK 13
14 Fuel selectors (2) ..... ON 14
15 De-ice system ..... CHECK, if required 15

- To check function of windshield de-ice press WINDSHIELD button, verify fluid spraying (only if necessary)
- “DEICE PRES HIGH” ..... verify not illuminated
  “DEICE LVL LO” ..... illuminated if liquid quantity < 10 litre
  “DEICE PRES LO” ..... on 2 minutes after test initiation (point 3)
  PUMP 1 ..... select
  DEICE ..... HIGH
  “DEICE PRES LO” ..... verify OFF (may take up to 20 seconds)
  PUMP 2 ..... select
  Ice lights ..... ON / visual inspection, check / OFF
  “DEICE PRES HIGH” ..... verify not illuminated
  “DEICE PRES LO” ..... verify not illuminated
  DEICE ..... OFF
  ANNUN-TEST ..... OFF

CHECK AFTER ENGINES START COMPLETED

TAXI CHECK

1 Brakes & steering.....CHECKED..... 1

- Check braking function of both pilots

2 Flight instruments.....CHECKED..... 2

- Check for consistency and stability in turns left and right; ADI, HSI and compass

TAXI CHECK COMPLETED

RUN-UP

1 Parking brake.....SET..... 1
2 Fuel selectors (2).....ON..... 2
3 Circuit breakers.....CHECK..... 3
4 Engine instruments.....GREEN..... 4
5 Zone behind aircraft.....CLEAR..... 5
6 Power levers (2).....IDLE..... 6
7 ECU TEST.....PERFORM..... 7

- ECU test buttons.....PRESS and hold
  Verify “L/R ECU A / B fail”.....ON
  Props cycling (twice increase above 1800 RPM & decrease)
  Verify “L/R ECU A / B fail”.....OFF
  a slight shake of the engine might occur
  ECU test buttons.....release

8 VOTER switches (2).....A / AUTO / B / AUTO..... 8

- Check engine running without a change / a shake may occur

RUN-UP COMPLETED

CHECK BEFORE DEPARTURE

1	Alternate air	CLOSED	1
2	Flight controls	FREE & CORRECT L / R / UP / DN	2
3	Trims	SET FOR T/O	3
4	Flaps	SET T/O	4
5	Avionics	SET	5

- COM: set / verify active and STBY frequencies
- GNS: insert flight plan and procedures according to expected routes, store if required
  Verify RAIM prediction for possible GPS approaches
  Verify active flight plan to be correct, from take-off to missed approach
- NAV: set required navigation aids according to expected route
  For departure: if possible one navigation aid to be set for the SID and one navigation aid to be set for possible contingency and inflight return
  Check ID if possible, set course navigation 1 & 2, choose bearing pointers and display DME window
- Standby navigation aid: according to expected use for main or back-up navigation
- Verify desired display on PFD and MFD (insets / track up / MAP DCLTR)

6	Fuel quantity	L+R / ENDURANCE	6

- Note taxi fuel used / double check quantity & resulting endurance

7	Fuel pumps (2)	ON	7
8	Pitot heat	AS REQUIRED	8

- Switch pitot heat on when OAT < 5 °C and visibility less than 5 km

9	Cabin and pax	SECURED	9
10	ATC clearance	VERIFIED	10

- Review SID / cleared altitude selected and squawk set

11	Departure briefing	COMPLETED	11

- Briefing for take-off abortion and contingencies after take-off done

CHECK BEFORE DEPARTURE COMPLETED

LINE UP CHECK

1	Canopy / rear door	CLOSED & LOCKED	1
2	Time	NOTED	2
3	Transponder	CODE / MODE CHECKED	3
4	Approach sector & runway	CLEAR	4
5	Landing light	ON	5
6	De-ice system	AS REQUIRED	6

LINE UP CHECK COMPLETED

Before brake release: available power check

Available power check

10 seconds power MAX, RPM 2250 - 2300, min load according to table below

	OAT [°C]								
Altitude [ft]	**-35**	**-20**	**-10**	**0**	**10**	**20**	**30**	**40**	**50**
0									91%
2000									
4000			99%			97%	96%	93%	
6000									
8000			98%	98%	98%	96%	95%	92%	
10000	98%	97%	97%	95%	94%	92%	89%		

CLIMB CHECK

1	Gear	UP	1
2	Flaps	UP	2
3	Climb power	SET (92%)	3
4	Fuel pumps (2)	OFF	4
5	Engine instruments	CHECKED	5
6	Alternate air	AS REQUIRED	6
7	Landing light	AS REQUIRED	7

CLIMB CHECK COMPLETED

CRUISE CHECK

1	Altimeters	CHECKED (STD / QNH)	1
2	Cruise power	SET	2
3	Engine Instruments	CHECKED	3
4	Fuel quantity	L+R / ENDURANCE	4

CRUISE CHECK COMPLETED

DESCENT CHECK

1	ATIS or AD information	RECEIVED	1
2	Approach briefing	COMPLETED	2
3	Avionics	SET	3
4	Circuit breakers	CHECKED	4
5	Cabin & pax	SECURED	5

DESCENT CHECK COMPLETED

APPROACH CHECK

1	Altimeters	QNH SET	1
2	Fuel pumps (2)	ON (operative engine)	2
3	Fuel quantity	L+ R / ENDURANCE	3
4	Fuel selectors (2)	ON (operative engine)	4
5	Gear warning & fire detector	TESTED	5
6	Landing light	ON	6

APPROACH CHECK COMPLETED

LANDING CHECK

1	Gear	3 GREENS CHECKED	1
2	Flaps	SET FOR LANDING	2
3	Park brake	RELEASED	3
4	Rudder trim	NEUTRAL	4

LANDING CHECK COMPLETED

AFTER LANDING CHECK

1	Time	NOTE	1
2	Alternate air	CLOSE	2
3	Pitot heat	OFF	3
4	Fuel pumps (2)	OFF	4
5	Flaps	UP	5
6	Landing light	OFF	6

AFTER LANDING CHECK COMPLETED

ENGINE SHUT DOWN AND PARKING

1	Parking brake	SET	1
2	Power levers (2)	MAX 10% for 1 min	2
3	Engine instruments	CHECK	3
4	Remaining fuel / time counter	NOTE	4
5	121.500	CHECK	5
6	Avionic master	OFF	6
7	Electrical consumers (except strobe light)	OFF	7
8	Engine masters (2)	OFF	8
9	Start key	REMOVE	9
10	Strobe light	OFF	10
11	Electric master	OFF	11
12	Flight data & documents	NOTE & COMPLETE	12

- Note block time, flight time and landings
- Compare actual fuel consumed versus planned burn off

13	Aircraft	TO BE SECURED	13

PARKING CHECK COMPLETED

	up to 1900 kg	
	flaps UP	***flaps APP***
V_R rotate	*80*	*76*
V_X best angle	*-*	*82*
V_Y best rate	*90*	*85*
V_{YSE} blue line	*85*	
V_{YSE} blue line in ice	*88*	

	up to 1900 kg	***in ice***
V_{REF} flaps UP	*86*	*94*
V_{REF} flaps APP	*84*	*90*
V_{REF} flaps LDG	*84*	*prohibited*

INTENTIONALLY LEFT BLANK