1. Before Starting Engines

TQ: Throttle Quadrant; TT: Tact&Toggle (RS=Rote Schalter, 1..3 oben 4...6 unten)

Cabin door, escape hatch and baggage	SECURED	
Weight and CG	CHECKED	
Flight controls (movement and response)	CHECKED	
Seat belts and harnesses	FASTENED	
Fuel/Runway	s. Appendix (45-65 gph + 60 gallons Take-Off)	
Parking brake	SET	
Circuit breakers	IN	
Alternate static source	NORMAL	Mulde in Kopilot-Tür
Cabin Temp Mode	OFF	
Landing gear handle	DOWN	
Condition levers (TQ: rote Hebel)	CUT OFF	
Propeller levers (TQ: blaue Hebel)	HIGH RPM	ganz vorne
Power levers (TQ: Throttle)	IDLE	
Left subpanel switches	ALL OFF	Ign, Strt/Gen,Fuel
Prop Sync (TT: RS6)	OFF	
All Lamps (TT: T1...T11)	OFF	

2. Prepare Aircraft

Battery switch (TT: RS1)	ON	
Voltmeter	CHECK	
Panel Light (TT: T6)	ON, IF REQUIRED	
Cabin Light (TT: T5)	ON, IF REQUIRED	
Nav Light (TT: T1)	ON	
Annunciators	TEST	
Fuel Selectors (TQ: 9/10/11/12)	ON	rote Drehschalter unter Pilotensitz
ENG FUEL PRESS annunciators	Check illuminated	
Maschinenpnl, Warnlampen-Pnl:	0 bzw. rote Lampe	
Fuel pump L (TQ: 21/22)	CHECK SOUND, ANNUNC. ILLUM.	
Fuel pump R (TQ: 23/24)	CHECK SOUND, ANNUNC. ILLUM.	
ENG FUEL PRESS annunciators	CHECK GREEN	
Fuel Pressure	CHECK	

3. Right Engine Start

Beacon Light (TT: T2)	ON	
Right Ign switch (TQ: 15/16)	ON	(TQ: 15=up)
Rgt IGN annunciator	CHECK ILLUMINATED	
Rgt Starter/Gen switch (TQ: 19/20)	STARTER ON	(TQ: 20=down)
Rgt START annun.	CHECK ILLUMINATED	
	WAIT FOR > 12% (Stable NG)	
Rgt condition lever (TQ: roter Hebel)	LOW IDLE	
Check ITT , NG , Oil pressure	1090°C max., rise in 10s	
	CHECK NG = 51% (Idle Wait)	
Rgt Ign switch (TQ: 15/16)	AUTO	(TQ: 16=down)
Rgt Starter/Gen switch (TQ: 19/20)	GENERATOR ON	(TQ: 19=up)
Rgt Generator load	CHECK 0.5 MAX	
Rgt Starter/Gen switch (TQ: 19/20)	OFF	(TQ: 20=dn)

4. Left Engine Start

Left Ign switch (TQ: 13/14)	ON	(TQ: 13=up)
Lft IGN annunciator	CHECK ILLUMINATED	
Lft Starter/Gen switch (TQ: 17/18)	STARTER ON	(TQ: 18=dn)
Lft START annun.	CHECK ILLUMINATED	
	WAIT FOR > 12% (Stable NG)	
Lft condition lever (TQ: roter Hebel)	LOW IDLE	
Check ITT , NG , Oil pressure	1090°C max., rise in 10s	
	CHECK NG = 51% (Idle Wait)	
Lft Ign switch (TQ: 13/14)	AUTO	(TQ: 14=dn)
Lft Starter/Gen switch (TQ: 17/18)	GENERATOR ON	(TQ: 17=up)
Lft Generator load	CHECK 0.5 MAX	
Right Starter/Gen switch (TQ: 19/20)	GENERATOR ON	(TQ: 19=up)
Rgt Generator load	CHECK 0.5 MAX	

5. After Start

Inverter switch (TT: RS2)	MN INV
Avionics Master (TT: RS4)	ON
Lights (TT: T5=Cabin, T6=Panel)	AS REQUIRED
Radios	ON
GPS, NAV, ADF, HDG	AS REQUIRED
Altitude	SET
Autopilot (TT: A1)	Check
Electric trim	Check (tab control, wheel switch)
Autopilot (TT: A1)	OFF
Flight Director (TT: A5)	ON
Autopilot (TQ: 2)	Check NAV or GPS guidance
Cabin temp/mode	As required (Check NG/ITT/load)
Annunciators	Test, clear
Instruments	Check
Brakes	Check
Gyros	Check

6. Runup

Parking Brake	SET

Fuel pumps test:

L Pump switch (TQ:21/22)	Off (Check L ENG FUEL PRESS annunciator off)
L Pump switch (TQ:21/22)	Left Pump 2, then 1
R Pump switch (TQ:23/24)	Off (Check R ENG FUEL PRESS annunciator off)
R Pump switch (TQ:23/24)	Right Pump 2, then 1

Fuel Selectors (TQ: 9/10/11/12)	Crossed 10-15 seconds	(TQ: 9/10=le 11/12=ri)
Fuel Selectors	Return both to ON	

Engine Runup:

Power	1900 RPM
ITT/ TRQ	Monitor
Prop governors (TQ: blaue Hebel)	EXERCISE

7. After-Runup Checks

Engine ice protect (TQ: 4)	Check
Gyro Pressure	Check
Instruments and Avionics	Check

8. Cabin Pressurization

Press. Rate Control	Check "cabin climb rate" on 12 o'clock position
Pressurisation	SET (cruise altitude + 500 ft on inner scale)
While setting altitude	turn cabin controller softly, watch "Cabin Climb" for 500-700 fpm,
Inflight	PSI on inner green/red scale: Max. pressure difference is 4.7 PSI

9. Before Taxi

Trim	Set to takeoff range (+5...+10%)
Flaps	UP for takeoff (Chk: APH=approach, DN=land)
Flight controls	Full, free, correct
Power	IDLE
Propeller	Check feathering
Fuel, flight engine instruments	Check (oil temp!)
Annunciators	Off/considered
Prop sync (TT: RS6)	OFF
Get ATC Taxi Clearance	ATC CLEARED OK
Taxi Lts (TT: T10)	ON
Transponder	ALTITUDE
Pitot Heat (TQ: 3)	As required
Ice protection (TQ: 4)	As required
Windshield Anti-Ice (TQ: 1)	As required
Parking Brake	Release
Condition Lever (TQ: rote Hebel)	use as Throttle while taxying

10. During Takeoff

Oil Doors (TQ: 6)	Open during max climb	(5=close; 6=open)
Get ATC Departure Clearance	ATC CLEARED OK	
Strobes (TT: T8)	ON	
Landing Lights (TT: T11)	ON	
Taxi Lights (TT: T10)	OFF	
Ignition On annunciators	Check extinguished	
Engines	Check ITT/Tq in limits	
Rotation airspeed	Above 90 KIAS	

11. After Takeoff

Landing gear (TQ2: Hebel 6)	UP
Flaps (TQ2: Hebel 1)	UP
AP HDG/NAV/ALT ARM (TT: A2/A3/B2)	AS REQUIRED
Autopilot (TT: A1)	ENGAGE

12. Climb

Engines	Climb power set, check limits	
Props (TQ1: blaue Hebel)	SET	
Prop sync (TT: RS6)	ON	
Engine instruments	Monitor	
Oil Doors (TQ: 6)	Open during max climb	(5=close; 6=open)

Climb	Cruise: 2000 fpm ; Max: 4000 fpm
Engine Instruments	Monitor

- If oil temperature is excessive, **open oil doors** and/or **increase airspeed** by reducing rate of climb.
- Reduce power as necessary to keep **TRQ, ITT and NG within safe limits** (green arcs).

Cabin pressurisation	Check max. 500-700 fpm lift on "cabin climb"	
Yaw Damper (TT: B5)	ENGAGE !	
Landing Lights (TT: T11)	OFF	
Props (TQ1: blaue Hebel)	SET ON CRUISE ALTITUDE (1900 RPM)	
Oil Doors (TQ: 5)	Close	(5=close; 6=open)

13. Descent

Pressurisation	SET (target airport alt. + 500ft on outer scale)	
	Check max 500-700 fpm sink on "cabin climb"	
Altimeter	SET (ATIS / ATC / Active Sky)	
Windshield anti-ice (TQ: 1)	As required	
Power	As required	
Airspeed	Monitor, keep within limits	
Oil Doors (TQ: 6)	Open if necessary	(5=close; 6=open)

14. Before Landing

Autopilot (TQ: 2)	Check NAV or GPS guidance
Autopilot	APPR on glideslope
Pressurisation	Check inner scale for zero differential pressure
Prop sync (TT: RS6)	OFF
Yaw Damper (TT: B5)	OFF
Flaps	APPROACH (max. extension speed **174kt** IAS)
Landing gear	DOWN (max. extension speed **174kt** IAS)
Landing Lights (TT: T11)	ON

15. Approach / Landing

Initial approach airspeed	**120 KIAS**

Short final:

Flaps	FULL DOWN (max. extension speed **140kt** IAS)
Props (TQ: blaue Hebel)	HIGH RPM (ganz nach vorne)
Short final airspeed	**100 KIAS**

On the Runway:

Power	Beta or reverse down to **40 kts**
Flaps	UP

16. Runway to Parking

Taxi lights (TT: T10)	ON
Landing (TQ: T11)	OFF
Strobes (TT: T8)	OFF
Pitot Heat (TQ: 3)	OFF
Ice protection (TQ: 4)	OFF

After Parking:

Parking brake	SET
Taxi lights (TT: T10)	OFF

17. Shutdown

Parking brake	SET	
Transponder; GPS; Nav-Instruments	OFF	
Avionics Master (TT: RS4)	OFF	
Inverter switch (TT: RS2)	OFF	
Cabin Temp Mode	OFF	
Pitot Heat (TQ: 3)	Check Off	
De-Ice (TQ: 4)	Check Off	
Windshield Anti-Ice (TQ: 1)	Check Off	
Battery	Charged	
ITT	Below 650°C for 1 min	
Oil Doors (TQ: 5)	Closed	(5=close; 6=open)
Lft Ignition switches (TQ: 13/14)	OFF	(TQ: 13=up)
Rgt Ignition switches (TQ: 15/16)	OFF	(TQ: 15=up)
Lft Starter/Gen switch (TQ: 17/18)	OFF	(TQ: 18=dn)
Rgt Starter/Gen switch (TQ: 19/20)	OFF	(TQ: 20=dn)
Condition levers (TQ: rote Hebel)	Cut-off	
Props (TQ: blaue Hebel)	Feather	(ganz nach hinten)
Wait	NG < 10%	
Beacon Lt (TT: T2)	OFF	
Fuel pumps left (TQ: 21/22)	OFF	
Fuel pumps right (TQ: 23/24)	OFF	
Fuel Selectors (TT: 9/10/11/12)	OFF	rote Drehschalter zwischen Sitzen
Nav (TT: T1)	OFF	
DC Volt/Load	Check	
Cabin Light (TT: T5)	OFF	
Panel Lt (TT: T6)	OFF	
Battery (TT: RS1)	OFF	
Controls	Locked	

App. A - Balked Landing

Power	Maximum
Props (TQ: blaue Hebel)	Full forward
Airspeed	**95 kts** until clear of obstacles
Flaps	Up
Gear	Up

App. B - Performance

Runway Length Takeoff	1.000 ft (50 ft. obstacle)
Runway Length Landing	900 ft (50 ft. obstacle)
Service Ceiling (2 engine)	28.000 ft
Service Ceiling (1 engine)	27.000 ft
Max. landing weight	6.775 lbs
Normal Fuel Burn	66 gph
Long Range Fuel Burn	49 gph
Andere Angaben:	66 gallons/hr + 60 gallons/takeoff