

NOP Checklist

ABBREVIATED CHECKLIST ZLIN 242L

WARNINGS:

Aerobatics is **prohibited** with fuel in wingtip fuel tanks

Aerobatics is **prohibited** with less than 5 liters of oil

Aerobatics is **prohibited** with items on baggage shelf

1. BEFORE ENTERING AIRCRAFT

1. Weight and Balance.....CALCULATED
2. External inspection.....DONE
3. Chocks.....REMOVED
4. Pitot and static air protection.....REMOVED
5. Lifeweats and first aid kit.....CHKD
6. Fire Extinguisher.....CHKD
7. Loose objects.....SECURED
8. Ignition switch.....OFF
9. Propeller.....TURN 3 REV.

2. BEFORE ENGINE START

10. TACHO- and Hobbsmeter readings.....NOTE
11. Seat.....ADJUST
12. Harness.....LOCKED
13. Controls.....UNLOCK
14. Wing flaps.....CHECK
15. Parking brake.....SET
16. Cowl Flap.....PULL – CLOSED
17. Nitrogen pressure.....CHECK
18. Master switch.....ON
19. Battery switch.....ON
20. Generator switch.....ON
21. Engine Instr. switch.....ON
22. Flight Inst. switch.....ON
23. Fuel quantity.....CHECK
24. Annunciators.....3 LIGHTS ON
(stall warn failure, generator, oil pressure loss)
25. Signaling.....PRESS+RELEASE
(check horn + light in all annunciators)
26. Static Heating.....ON+OFF
(check discharge increase)

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27. Pitot Heating.....ON+OFF
(check discharge increase)
28. Cockpit and instrument lighting.....CHECK
29. Canopy.....CLOSE+CHECK

3. ENGINE START

30. Fuel valve.....BOTH
31. Comm/Nav I+II.....CHECK OFF
32. Beacon.....ON
33. Throttle.....2 CM OPEN
34. Prop.....PUSH (high RPM)
35. Mixture.....PUSH (full rich)
36. Fuel pump (if necessary).....ON+OFF
(3-5 sec. until fuel pressure stabilizes)
37. Fuel pressure.....CHECK (min. 14 psi)
38. Mixture.....PULL (full lean)
39. Propeller area.....CHECK CLEAR
40. Ignition switch.....START
41. Mixture.....PUSH (full rich)
42. Throttle.....1000 RPM
43. Oil pressure.....CHECK
(min. 25 psi within 30 sec., or shut down engine!)
44. Time / Timer.....NOTE / ENGAGE
45. Flight Instruments.....ON
46. Comm/Nav I+II.....ON
47. Radios and Transponder.....SET
48. G-meter.....RESET
49. AMU.....CHECK
(check diode flash regularly every 2 sec.)

4. ENGINE WARM-UP AND GROUND RUNNING

50. Engine Speed.....1200 – 1500 RPM
51. Generator annunciator.....CHECK OFF
52. VA meter.....>= 24 V
53. AMP meter.....CHECK
54. Fuel valve.....CHECK
(Check engine runs smoothly on LEFT and RIGHT)
55. Oil temperature.....~ 60°C
(may take 2-6 minutes)

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5. BEFORE TAXI CHECK

- 56. Altimeter.....SET (+/- 60')
- 57. Attitude indicator.....ERECT AND SET
- 58. Flaps.....RETRACTED
- 59. Taxi light.....ON
- 60. Lighting switch.....ON
- 61. Time/Timer.....CHECK / NOTE
(for block time)
- 62. Parking brake.....RELEASE
- 63. Brakes.....CHECK
- 64. Flight instruments movement.....CHECK WHILE TAXIING

6. ENGINE RUN-UP CHECK

CAUTION: Do not perform engine run-up on loose terrain!

- 65. Brakes.....HOLD
- 66. Control stick.....PULL
- 67. Throttle.....2200 RPM
- 68. Oil pressure.....GREEN
- 69. Fuel pressure.....GREEN
- 70. Magnetos.....CHECK
(Max. drop 175 RPM, Max diff. 50 RPM)
- 71. Prop.....3 x (PULL – PUSH)
- 72. Prop.....2100 RPM
- 73. Throttle / Manifold pressure.....+ 3 inHg
- 74. Prop.....CHECK 2100 rpm
- 75. Throttle / Prop.....1200 / FULL
- 76. Controls.....FULL FREE MOVEMENT
- 77. Elevator trim.....NEUTRAL POS.
- 78. Rudder trim.....½ FULL RIGHT
- 79. Cowl flap.....OPEN (if OAT > -5°C)
- 80. Pitot Heating.....ON
- 81. Static Heating.....ON
- 82. Canopy.....LOCKED AND CHKD
- 83. Fuel valve.....BOTH
- 84. AMU.....RECHECK
- 85. CO detector.....CHECK
- 86. Helmet visor.....DOWN

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7. BEFORE TAKE-OFF CHECK (ON RWY)

- 87. Time.....NOTE
(for airborne time)
- 88. Gyro compass.....RWY HEADING
- 89. Transponder.....ALT
- 90. Flaps.....TAKEOFF POS.
- 91. Fuel pump.....ON
- 92. Taxi light.....OFF
- 93. Landing light.....ON
(just before rolling)

8. TAKE-OFF

- 94. Throttle.....FULL
- 95. Oil pressure.....GREEN
- 96. Rotate.....55 kts
- 97. Climb.....70 kts
- 98. Brakes.....APPLY

9. AFTER TAKE-OFF CHECK

- 99. Flaps.....UP (300' AGL)
- 100. Fuel pump.....OFF
- 101. Landing light.....OFF

10. CRUISE CHECK

- 102. Manifold pressure & Prop.....AS DESIRED
(65%: 22.9 / 2350)
(75%: 24.3 / 2450)
- 103. Cowl flap.....CLOSE
- 104. Mixture.....LEAN
(star on EGT meter)

11. DESCENT CHECK

- 105. Altimeter.....SET
- 106. Mixture.....RICH
- 107. Cowl flap.....CLOSE
(if risk of engine overcooling)
- 108. Cylinder head temp.....MONITOR

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12. BEFORE LANDING CHECK

109. Fuel quantity.....	CHECK
110. Fuel valve.....	BOTH
111. Engine instruments.....	CHECK
112. Mixture.....	PUSH (full rich)
113. Flaps.....	TAKE OFF POS.
114. Landing Light.....	ON
115. Fuel pump.....	ON

13. LANDING (BASE / FINAL)

116. Flaps.....	LANDING POS.
117. Prop.....	PUSH (high RPM)
118. Speed on final.....	75 kts.

14. AFTER LANDING CHECK

119. Landing light.....	OFF
120. Taxi light.....	ON
121. Fuel pump.....	OFF
122. Flaps.....	UP
123. Transponder.....	STD. BY.
124. Time.....	NOTE

15. ENGINE SHUTDOWN & PARKING

125. Throttle.....	1800 RPM for 15 sec.
126. Magnetos.....	CHECK GROUNDING
127. Comm/Nav I+II.....	OFF
128. Mixture.....	CUT OFF
129. All circuit switches.....	OFF
130. Master switch.....	OFF
131. Ignition switch.....	OFF
132. Fuel valve.....	OFF
133. Controls.....	LOCK
134. Parking brake.....	AS DESIRED
135. Cowl flap.....	AS DESIRED
136. Flaps.....	TAKEOFF → 0
137. Time / Timer (for block time).....	NOTE/DISENGAGE
138. Tacho and Hobbs time.....	NOTE
139. Max and Min G load.....	NOTE

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Motorstartsproblemer? Prøv denne guide.

Det hjælper ikke på starten at hånd-cranke motoren inden opstart (pkt. 9 i checklisten), men det er godt at gøre alligevel idet man kan mærke at der er kompression på i alle cylindre og fordi man smører motoren inden opstart.

Meget kold motor (-10 til 5 grader)

→ Prime 4-5 sekunder. 2-3 cm på gashåndtag

Kold motor (5-20 grader)

→ Prime 3 sekunder. 3-4 cm. på gashåndtag

Semivarm motor (f.eks. efter taxi til fuelstand)

→ Prime 1 sek. 3 cm på gashåndtag.

Varm motor (f.eks. efter flyvning)

→ Prime 1 sek. 3-4 cm. på gashåndtag.

Druknet motor

→ Lad den stå lidt. Prime 1 sek. Fuld gas og crank lidt ekstra. Den skal nok komme. Vær klar til at reducere på gashåndtag.

(typiske symptomer på druknet motor er lugt af fuel i udstødning/udstødningsrør, evt. suppleret med dryp af fuel fra udstødningsrør og/eller dræn ved forhjulet)

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EMERGENCY

ZLIN 242L - EMERGENCY PROCEDURES

EP 1: ENGINE FAILURE DURING TAKE-OFF RUN

1. Throttle.....IDLE
2. Brakes.....AS REQUIRED
3. Obstacles.....AVOID
4. Fuel valve+Master +Ignition switch.....OFF

EP 2: ENGINE FAILURE AFTER TAKE-OFF

1. Airspeed.....78 kts (minimum)
2. Flaps.....AS NECESSARY
3. Obstacles.....AVOID
4. Fuel valve+Master +Ignition switch.....OFF

EP 3: ENGINE FAILURE IN FLIGHT

1. Aircraft.....MAINTAIN CONTROL
2. Fuel valve.....BOTH (L+R)
3. Fuel pump.....ON
4. Mixture.....PUSH (full rich)
5. Ignition switch.....BOTH
6. Airspeed and trim.....A:68 U:70 N:73 kts.
(for max gliding range)

Engine restart – NO starter:

7. Prop.....PUSH (high RPM)
8. Throttle.....1/4 OPEN
9. Airspeed.....INCREASE
(Expect 135-140 kts to restart propeller)

Engine restart – WITH starter:

7. Gliding speed.....MAINTAIN
8. Throttle.....1/4 OPEN
9. Ignition switch.....START
10. Master switch.....OFF
11. Safety belts.....TIGHTEN
12. Flaps.....AS REQUIRED

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EP 4: FORCED LANDING

1. Aircraft.....MAINTAIN CONTROL
2. Airspeed.....78-85 kts.
3. Landing area.....CHOOSE SUITABLE
4. Transponder / Radio.....7700 + MAYDAY
5. Fuel valve.....OFF
6. Ignition switch.....OFF
7. Master switch.....OFF
8. Safety belts.....TIGHTEN
9. Flaps.....AS REQUIRED

EP 5: COCKPIT FIRE

1. Fire source.....IDENTIFY / LOCATE
2. Electrical fire: Master switch.....OFF
3. Fire extinguisher.....USE IF NECESSARY
4. Ventilation.....OPEN FULLY
5. Emergency landing.....ASAP

In case of emergency.....BAIL OUT (EP 8)

EP 6: ENGINE FIRE ON GROUND

1. Fuel valve.....OFF
2. Throttle.....FULL
3. Ventilation and Heating.....PUSH + "0"

After engine stops:

4. Ignition switch.....OFF
5. Master switch.....OFF
6. Circuit switches.....OFF
7. Crew.....ABANDON
8. Fire Extinguisher.....USE

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EP 7: ENGINE FIRE IN FLIGHT

1. Fuel valve.....OFF
2. Throttle.....FULL
3. Fuel pump.....OFF
4. Ventilation and Heating.....PUSH + "0"

After engine stops:

5. Ignition.....OFF
6. Master switch.....OFF
7. Airspeed.....78-85 kts.

If fire continues:

8. EXECUTE ALTERNATE SIDESLIPS
9. INCREASE AIRSPEED

If fire is extinguished:

10. EXECUTE EMERGENCY LANDING

If fire still continues:

11. BAIL OUT (EP 8)

EP 8: BAIL OUT

1. Aircraft heading.....UNSETTLED AREA
2. Transponder / Radio.....7700 + MAYDAY
3. Fuel valve.....OFF
4. Ignition switch.....OFF
5. Canopy emergency release.....OPEN
(do **NOT** release canopy lock!)
6. Canopy.....PUSH UP
7. Headsets/Helmets.....THROW OUT/DISCONN.
8. Harness.....RELEASE
9. Aircraft.....ABANDON

EP 9: GENERATOR FAILURE

1. V-A meter.....CHECK DRAIN / VOLTAGE
2. Generator switch.....RESET "ON"
3. V-A meter.....CHECK DRAIN / VOLTAGE

If current drain of battery continues:

4. Generator switch.....OFF
5. Static heating switch.....OFF
(in IMC use alternate static source)
6. Unnecessary electrical equip.....OFF
7. Land as soon as practical, within 30 minutes

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EP 10: OIL PRESSURE LOSS

1. Oil pressure gauge.....CHECK
2. Engine speed.....INCREASE

If oil pressure still under limit:

3. Engine speed.....DECREASE
4. Precautionary landing.....EXECUTE ASAP

EP 11: LOW FUEL WARNING

1. Fuel valve.....MOST FULL TANK
2. Fuel pressure.....CHECK

EP 12: FLIGHT IN ICING CONDITIONS

1. Pitot heat.....ON
2. Static heat.....ON
3. Heating on windshield.....OPEN FULLY
4. Flight level.....CHANGE
5. Ventilation.....CLOSE

If icing conditions continue:

6. Land.....ASAP

EP 13: NITROGEN PRESSURE DROP

1. Land.....AS SOON AS PRACTICAL
2. High "G" maneuvers.....AVOID

EP 14: DITCHING

1. Forced landing.....COMPLETE (EP 4)

Just before ditching:

2. Canopy emergency release.....OPEN
(do **NOT** release canopy lock!)
3. Canopy.....PUSH UP

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