Checklist for Diamond DA42 NG-VI NXI

Edition #: 1.1 NG-VI NXI Edition date: 15.05.2020

Please observe:

The file you are receiving hereby combines all three sections of the checklist: Normal Checklist, Emergency Checklist and Abnormal Checklist.

All pages of a new edition will have the same new “edition #” and “edition date”, even if only one page was amended and all other pages still have the same, unchanged content.

Therefore the “List of Effective Pages” (LEP) is provided. It is here where you can see whether a particular page was amended. Pages which have been amended by a new edition will be marked yellow. For all other pages you will see which original “edition #” (and of course any higher “edition #”) is still valid.

Note:

The system of assigning “Edition #” is as follows:

• if the revision affects all types, a new edition # (without a decimal figure) will be assigned to all of the checklists
• if the revision does not affect all types, the affected checklists will get subsequent “decimal figures” until a major revision affecting all checklists is issued.

Have a lot of nice flights and happy landings!
Peter Schmidleitner

Comments explaining Edition # 1.0 NXI are on page 2 of this document

Checklist DA42 NG-VI NXI LEP

<table>
<thead>
<tr>
<th>Page</th>
<th>Following Edition (or any higher)</th>
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<tbody>
<tr>
<td></td>
<td>Section: Normal Checklist</td>
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<td>20.02.2019</td>
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<tr>
<td>11</td>
<td>1.1 Nxi</td>
<td>15.05.2020</td>
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</table>

|      | Section: Emergency Checklist     |               |
| 1    |                                 | 18 15.12.2017 |
| 2    |                                 | 18 15.12.2017 |
| 3    |                                 | 18 15.12.2017 |
| 4    |                                 | 18 15.12.2017 |
| 5    |                                 | 18 15.12.2017 |
| 6    |                                 | 18 15.12.2017 |
| 7    |                                 | 18 15.12.2017 |
| 8    |                                 | 18 15.12.2017 |
| 9    |                                 | 18.1 15.03.2018 |
| 10   |                                 | 18 15.12.2017 |
| 11   |                                 | 18 15.12.2017 |
| 12   |                                 | 18 15.12.2017 |
| 13   |                                 | 18 15.12.2017 |
| 14   |                                 | 18 15.12.2017 |
| 15   |                                 | 18 15.12.2017 |
| 16   | 18.1                             | 15.03.2018    |
| 17   | 18                               | 15.12.2017    |
| 18   | 1.0 Nxi                          | 20.02.2019    |
| 19   | 18                               | 15.12.2017    |
| 20   | 1.0 Nxi                          | 20.02.2019    |

|      | Section: Abnormal Checklist      |               |
| 15   |                                 | 18 15.12.2017 |
| 16   |                                 | 18.1 15.03.2018 |
| 17   |                                 | 18 15.12.2017 |
| 18   | 1.0 Nxi                          | 20.02.2019    |
| 19   | 18                               | 15.12.2017    |
| 20   | 1.0 Nxi                          | 20.02.2019    |
Comments explaining Edition # 18

Normal Procedures:
No change

Emergency Procedures:
Pages rearranged andrenumbered

Major changes:
Page 5: L/R STARTER
Pages 6/7: Engine Fire
Page 9: Engine Restart

Abnormal Procedures:
Pages renumbered

Comments explaining Edition # 18.1

Normal Procedures:
No change

Emergency Procedures:
Page 9: Engine Restart speeds corrected

Abnormal Procedures:
Pages 16, 18, 20: Editorial correction

Comments explaining Edition # 1.0 NXI
changes from legacy edition #18.1

Normal Procedures:
Page 10: \( V_{YSE} \) – “In Ice” speeds added
Page 10: Min Flight Mass - Editorial correction

Emergency Procedures:
Editorial correction

Abnormal Procedures:
Editorial correction

Comments explaining Edition # 1.1 NXI
changes from legacy edition #1.0 Nxi

Normal Procedures:
Blank Page deleted – Checklist Page sequence edited - Editorial Change
NORMAL CHECKLIST

This checklist is compiled according the guidelines of GAMA Specification No.1, SECTION 3, para 3.5, SECTION 3A, para 3A.5 and SECTION 4, para 4.5.

This checklist is a Recommended Operator Checklist and for reference only. It is not a substitute for and does not supersede the current approved Airplane Flight Manual or any of its supplements or parts thereof, or any training or procedures required by any regulatory or advisory bodies.
This checklist may not contain all procedures shown in the Airplane Flight Manual. For a comprehensive listing of all procedures consult the Airplane Flight Manual.
Use of the checklist is at the user's sole risk and discretion. Any possible liability of Diamond Flight Training and/or Diamond Aircraft Industries for any damages, injury or death resulting from its use is excluded.
All such terms and conditions shall be deemed to be explicitly accepted in full by using the checklist. If you do not understand, or if you disagree with, any of the above terms and conditions and in any jurisdiction that does not give effect to all provisions of these terms and conditions any use of the checklist is not permitted.

Use of the electronic checklist (if available):
Before using the electronic checklist on the G1000 the following sections have to be completed using this paper checklist:
• Preflight interior + exterior
• Preflight exterior
• Check before engine start items 1 to 23 (may be completed by heart).

This checklist also serves as a back up for the electronic checklist in case the G1000 MFD is not available.
**Attention!**
For use of fuel additives see AFM

* if ice protection is installed
** if AUX tanks are installed

**PREFLIGHT INTERIOR + EXTERIOR.**

1. Check airplane documents
2. Remove pitot cover
3. Check interior for foreign or loose objects
4. Check circuit breakers
5. Start key PULLED OUT
6. Gear selector CHECKED DOWN
7. Electric Master ON
   Check battery voltage
8. Gear 3 greens CHECKED
9. Check fuel quantity + temp
10. **AUX PUMPS (2) ON**
    if AUX FUEL E caution ON:
    AUX tank(s) empty
    AUX PUMPS (2) OFF
11. External lights ON
12. Parking Brake SET
13. Pitot heat ON
14. * Check de-ice fluid quantity
15. * Select de-ice pump 1
16. * De-ice HIGH/MAX
17. * Check DEIC PRES LO+HI out
18. * Select de-ice pump 2
19. * Check DEIC PRES LO+HI out
20. * Ice lights ON
21. * Check de-ice function
22. Check external lights
23. Check stall warning
24. Check pitot tube heat
25. Pitot heat OFF
26. External lights OFF
27. * De-ice, ice lights OFF
28. Electric Master OFF

**PREFLIGHT EXTERIOR**

Canopy left side

**Left main gear**
Strut (min 4 cm bare piston) & downlock
Tire condition, pressure (4,5 bar), position mark
Brake, hydraulic line
Gear door & linkage

**Left engine nacelle**
Drain gascolator and sample check
2 / 3 air inlets
Spinner, propeller
Gearbox oil level
Engine oil level
Cowling
Nacelle underside
Venting pipe
Exhaust
** Check AUX tank full

**Left wing**
Vortex generators
Wing leading edge, top- and bottom surface
Tank drain and sample check
Stall warning
Tank air vent
Fuel filler cap
Pitot probe (cover removed)
Wing tip, position light
Static dischargers
Aileron (freedom of movement, hinges, control linkage, covers if DA42)
Wing flap - hinge pin (covers)
Fuel cooler air in- & outlet
2 air outlets
**AUX tank vent
AUX tank drain and sample check

**Left fuselage**
Step
Rear cabin door
Fuselage left side
Static source
Antennas
## Tail
- Elevator & rudder (freedom of movement, hinges)
- Elevator & rudder trim - tabs
- Tail skid & lower fin
- Static dischargers

### Right fuselage
- Fuselage right side
- Static source
- Rear window
- Step

### Right wing
- Fuel cooler air in- & outlet
- ** AUX tank vent**
- ** Drain AUX tank**
- Wing flap
- Aileron (freedom of movement, hinges, control linkage, security)
- Static dischargers
- Wing tip, position light
- Wing leading edge, top- and bottom surface
- Fuel filler cap
- Tank air vent
- Tank drain
- Cabin air vent inlet
- Vortex generators

Canopy right side

## Right engine nacelle
- ** Check AUX tank full ?
- 3 air inlets / 2 air outlets
- Spinner, propeller
- Gearbox oil level
- Engine oil level
- Cowling
- Nacelle underside
- Venting pipe
- Exhaust
- Drain gascolator

Ventilation air inlet

### Right main gear
- Strut (min 4cm bare piston) & downlock
- Tire condition, pressure (4,5 bar), position mark
- Brake, hydraulic line
- Gear door & linkage

### Nose section
- * De-ice fluid tank
- L + R front baggage door locked
- OAT sensor
- EPU connection
- Landing / Taxi light

### Nose gear
- Strut (min 15cm bare piston) & lock
- Tire condition, pressure (6 bar), position mark
- Gear door & linkage

Chocks removed
- Tow bar removed
## CHECK BEFORE ENGINE START

1. Preflight check ........................................ COMPLETED
2. Baggage and tow bar ......................... SECURED
3. **AUX PUMPS (2) ....................................... OFF
4. Fuel selectors (2) .......... ON, safety guard closed
5. Power levers (2) ................................. IDLE
6. Parking brake ............................... SET
7. Alternate Air .................................... CLOSED
8. Fuel pumps (2) ................................. OFF
10. Gear selector ............................... DOWN
11. Avionic master ................................. OFF
12. Electric master ................................. OFF
13. Engine masters (2) ......................... OFF
14. Pitot heat ...................................... OFF
15. Alternate static ................................ CLOSED
16. Alternators (2) ................................. ON
17. VOTER switches (2) ......................... AUTO
18. All light switches .............................. OFF
19. Emergency switch ...................... OFF/GUARDED
20. ELT ........................................ ARMED
21. Circuit breakers ......................... CHECKED IN
22. Flap selector ................................. UP

If starting with external power:

- a. Prop area .......... CHECK CLEAR
- b. External power .......... CONNECT

23. Electric master ......................... ON
24. Rudder pedals ................................. ADJUSTED
25. Flight controls ......................... CHECKED
26. Trims ......................................... CHECKED
27. Gear warning + lights, fire detector .......... TEST
28. * De-ice ANNUN TEST .......... ON
29. * DEICE LVL LO caution ........ CHECKED ON if applic.
30. * Windshield de-icing .......... PUMP 1 + 2 CHECKED

Checklist continued next page
CHECK BEFORE ENGINE START continued

31 Flaps full travel -->LDG -->UP ..........CHECKED 31
32 Variable elevator stop .........................CHECK 32

Control stick ...................................... AFT and HOLD
Power levers........................................MAX
Check stop limit decreasing
Power levers......................................... IDLE
Check stop limit increasing

33 Passengers##################################INSTRUCTED 33
34 Seat belts ....................................FASTENED 34
35 Rear door.................................CLOSED and LATCHED 35
36 Front Canopy.................................. POS 1 or 2 36
37 G1000 ......................POWERED, ACKNOWLEDGED 37
38 MFD - EIS .................................... ENGINE 38
39 Fuel Quantity....... CHECKED, RESET/SET if requ. 39
40 Fuel temperature .........................CHECKED 40
41 Total time in service ......................... NOTED 41
42 * DEIC PRESS LO caution.................CHECKED ON 43
43 * De-ice ANNUN TEST......................OFF 44
44 Start key .......................................INSERTED 45
45 Power levers (2) .........................IDLE 46
46 ACL (strobe)...............................ON 47

End of Checklist

ENGINE START PROCEDURE

Normal sequence: first start LH engine

Propeller area ......................................CLEAR
Engine Master ...................................... ON
Annunciations / Eng.Instr. ...................... CHECKED
Glow indication...................................... OFF
Start key ............................................START
Oil pressure ................. OUTSIDE RED within 3 sec
Voltage, Electrical load ...............CHECK INDICATION
Annunciations / Eng.Instr. ................. CHECK

If external power was used:

External power .......................DISCONNECT

Start RH engine, procedure as above
# CHECK AFTER ENGINE START

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<th>Description</th>
<th>Status</th>
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<td>Oil pressure</td>
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<td>2</td>
<td>RPM 710 +/- 30</td>
<td>CHECKED</td>
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<tr>
<td>3</td>
<td>Fuel selectors (2)</td>
<td>X-FEED</td>
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<tr>
<td>4</td>
<td>Pitot heat ON, annunciation + Amps checked</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Pitot heat OFF</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Avionics master</td>
<td>ON</td>
</tr>
<tr>
<td>7</td>
<td>WX radar (if installed)</td>
<td>VERIFY STBY</td>
</tr>
</tbody>
</table>

## FMS SETUP

- I nitialize profile (AUX 4, MAP)
- F light plan
- R adios (COM, NAV, ADF, DME, CDI, BRG, RAIM)
- P erformance (speed bugs; Flight ID if applicable)

## AUTOPILOT TEST

- DISCONN press, check electric trim not working
- AP ON, check annunciations and FD
- DISCONN press, check AP off
- GA button press, check FD commands climb
- FD off

<table>
<thead>
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<th>Status</th>
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<tr>
<td>8</td>
<td>FMS setup</td>
<td>COMPLETED</td>
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<td>9</td>
<td>Autopilot test</td>
<td>COMPLETED</td>
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<tr>
<td>10</td>
<td>Flood light</td>
<td>CHECKED, ON</td>
</tr>
<tr>
<td>11</td>
<td>Position lights</td>
<td>ON as required</td>
</tr>
<tr>
<td>12</td>
<td>Fuel Selectors (2)</td>
<td>ON</td>
</tr>
<tr>
<td>13</td>
<td>Altimeters (2)</td>
<td>SET</td>
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<td>14</td>
<td>Standby horizon</td>
<td>CHECKED</td>
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<td>15</td>
<td>Transponder</td>
<td>CODE / MODE CHECKED</td>
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<td>16</td>
<td>Engine temperatures</td>
<td>CHECKED</td>
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<tr>
<td>17</td>
<td>Parking brake</td>
<td>RELEASED</td>
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</table>

Max power 50% until engine temperatures in green range

End of Checklist

## DURING TAXI

Check Brakes
Check nose wheel steering
Check flight instruments
### BEFORE TAKE OFF CHECK

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<td>Seat belts</td>
<td>FASTENED</td>
<td>2</td>
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<td>3</td>
<td>Adjustable backrest</td>
<td>UPRIGHT</td>
<td>3</td>
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<tr>
<td>4</td>
<td>Rear door</td>
<td>CLOSED + LATCHED</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Front canopy</td>
<td>CLOSED + LATCHED</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Front baggage doors</td>
<td>CHECKED CLOSED</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Door warning light</td>
<td>OFF</td>
<td>7</td>
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<td>8</td>
<td>Circuit breakers</td>
<td>CHECKED</td>
<td>8</td>
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<td>9</td>
<td>Electric elevator trim</td>
<td>CHECKED, T/O SET</td>
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</tr>
<tr>
<td>10</td>
<td>Fuel selectors (2)</td>
<td>CHECKED ON</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>Rudder trim</td>
<td>AS REQUIRED</td>
<td>11</td>
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<td>12</td>
<td>Flaps</td>
<td>Normal TKOF: UP Short field TKOF: APP</td>
<td>12</td>
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<tr>
<td>13</td>
<td>Flight controls</td>
<td>CHECKED</td>
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<tr>
<td>14</td>
<td>Power levers (2)</td>
<td>IDLE</td>
<td>14</td>
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<tr>
<td>15</td>
<td>MFD - EIS</td>
<td>ENGINE</td>
<td>15</td>
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<tr>
<td>16</td>
<td>Engine instruments</td>
<td>CHECKED</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>VOTER switches (2)</td>
<td>A, AUTO, B, AUTO</td>
<td>17</td>
</tr>
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</table>

**ECU TEST**

- ECU test buttons (2) press and hold
- "L/R ECU A/B fail" press and hold
- Props cycling
- "L/R ECU A/B fail" release

<table>
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<tr>
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<th>Description</th>
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<tr>
<td>18</td>
<td>ECU test (2)</td>
<td>PERFORMED</td>
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<tr>
<td>19</td>
<td>Pitot heat</td>
<td>AS REQUIRED</td>
<td>19</td>
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<tr>
<td>20</td>
<td>* Ice protection</td>
<td>AS REQUIRED</td>
<td>20</td>
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<tr>
<td>21</td>
<td>Transponder</td>
<td>CODE / MODE CHECKED</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>Fuel pumps (2)</td>
<td>ON</td>
<td>22</td>
</tr>
<tr>
<td>23</td>
<td>MFD - EIS</td>
<td>DEFAULT</td>
<td>23</td>
</tr>
<tr>
<td>24</td>
<td>Parking brake</td>
<td>RELEASED</td>
<td>24</td>
</tr>
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</table>

End of Checklist

### LINE UP PROCEDURE

- Landing light ON
- Approach sector CLEAR
- Runway IDENTIFIED

Available power check (see pg.10) PERFORMED
AFTER TAKE-OFF PROCEDURE
Brakes ................................................... APPLY
Gear ......................................................... UP
Alternate air: OPEN in rain, snow, visible moisture
At safe altitude: Flaps ................................................... UP
Climb power ..................................................... 92%

CLIMB TO CRUISE CHECK

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

End of Checklist

DESCENT / APPROACH CHECK

1. Landing data ............................................. RECEIVED 1
2. Altimeters (2) ......................................... SET 2
3. COM / NAV / FMS ....................................... SET 3
4. Safety harnesses .................................... FASTENED 4
5. Adjustable backrests ................................ UPRIGHT 5
6. Parking brake ......................................... CHECKED RELEASED 6
7. Rudder trim ............................................ AS REQUIRED 7
8. Gear warning + lights ............................... TEST 8
9. Landing light ............................................. ON 9

Normal Approach:
10. Fuel selectors (2) ................................. CHECKED ON 10
11. Fuel pumps (2) ......................................... ON 11

End of Checklist

1 engine out Approach:
10. Fuel selector (good engine) .................. CHECKED ON 10
11. Fuel pumps (good engine) ....................... ON 11

End of Checklist

FINAL CHECK

1. Flaps .................................................. LDG 1
2. Gear .................................................. 3 GREENS CHECKED 2
3. Rudder trim ........................................... NEUTRAL 3
GO AROUND PROCEDURE

Power ....................................................... MAX
Flaps........................................................ APP

Positive rate of climb:
Gear ........................................................... UP
Flaps........................................................... UP

Continue with take-off profile
At safe altitude:
Climb power .................................................. 92%

AFTER LANDING CHECK

When clear of runway

1 Alternate air .......................................... CLOSED 1
2 Pitot heat ................................................. OFF 2
3 Flaps ......................................................... UP 3
4 Fuel pumps (2) .......................................... OFF 4
5 * De-ice systems ....................................... OFF 5
6 Landing/Taxi light ................................. AS REQUIRED 6

End of Checklist

PARKING CHECK

1 Parking brake ........................................... SET 1
2 Power levers (2) ..................... max 10% for 1 min. 2
3 ELT ....................................................... CHECK not activated 3
4 MFD - EIS ........................................ ENGINE 4
5 MFD - EIS ................................ TTL TIME IN SVC NOTED 5
6 Avionic master ............................................ OFF 6
7 Electrical consumers except ACL (strobe) .... OFF 7
8 Engine Masters (2) ...................................... OFF 8
9 ACL (strobe) ................................................ OFF 9

When engine indications x-ed out:

10 Electric Master ......................................... OFF 10
11 Interior light ........................................... CHECKED OFF 11
12 Start key .................................................. REMOVED 12

End of Checklist

SECURING THE AIRCRAFT

Use chocks, consider parking brake released.
Cover the pitot probe.
Consider tie down ropes to mooring points.
All masses and speeds are for ACFT without increase of MTOM, MZFM, MLM

### STALLING SPEEDS KIAS for MTOM 1900 kg

<table>
<thead>
<tr>
<th>Condition</th>
<th>(V_{S0}) Flaps LDG, gear down</th>
<th>(V_{S}) Flaps APP, gear down</th>
<th>(V_{S}) clean, gear up</th>
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<tbody>
<tr>
<td>In Ice</td>
<td>62</td>
<td>66</td>
<td>69</td>
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In Ice: + 4-6 KIAS

### OPERATING SPEEDS KIAS for MTOM 1900 kg

<table>
<thead>
<tr>
<th>Condition</th>
<th>Min. control speed (V_{MCA})</th>
<th>Rotation speed</th>
<th>Best angle of climb (V_{X})</th>
<th>Best rate of climb (V_{Y})</th>
<th>Best rate of climb 1-eng. (V_{YSE})</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Flaps UP</td>
<td>76</td>
<td>--</td>
<td>90</td>
<td>85</td>
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<tr>
<td></td>
<td>Flaps APP</td>
<td>73</td>
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### Short field TKOF with flaps APP

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<table>
<thead>
<tr>
<th>Condition</th>
<th>Flaps APP</th>
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<td>71</td>
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</table>

### Operating speed in ice

- Max. flap speed (V_{FE}) Flaps APP: 133
- Max. flap speed (V_{FE}) Flaps LDG: 113
- Max. LG extension (V_{LOE}): 188
- Max. LG extended (V_{LE}): 188
- Max. LG retraction (V_{LOR}): 152
- Approach V_{REF} Flaps UP: 86 in ice: 94
- Approach V_{REF} Flaps APP: 84 in ice: 90
- Approach V_{REF} Flaps LDG: 84 in ice: prohib.
- Min. Go-around speed Flaps UP: 90
- Max. cruising speed (V_{NO}): 151
- Never exceed speed (V_{NE}): 188

### Mass

- Max. TKOF mass: 1900 kg
- Max ZF mass: 1765 kg
- Max. LDG mass: 1805 kg
- Empty mass - Min Flight Mass: 1450 kg
- Max. baggage in NOSE: 30 kg
- Max. baggage in COCKPIT: 45 kg
- Max. baggage in rear EXTENSION: 18 kg

### Available Power Check - 10 sec. power MAX, RPM 2250 – 2300, min. load acc. table below

<table>
<thead>
<tr>
<th>Altitude [ft]</th>
<th>OAT</th>
<th>-35°C</th>
<th>-20°C</th>
<th>-10°C</th>
<th>0°C</th>
<th>10°C</th>
<th>20°C</th>
<th>30°C</th>
<th>40°C</th>
<th>50°C</th>
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<tbody>
<tr>
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<td>99%</td>
<td>97%</td>
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<td>93%</td>
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<td>92%</td>
<td>89%</td>
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</tr>
</tbody>
</table>

**Edition # 1.1 NG-VI NXI** Does not replace the Airplane Flight Manual
All masses and speeds are for ACFT with increased MTOM, MZFM, MLM

**STALLING SPEEDS KIAS for MTOM 1999 kg**

<table>
<thead>
<tr>
<th>Flaps Configuration</th>
<th>(VSO)</th>
<th>(VS)</th>
<th>(V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDG, gear down</td>
<td>64</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>APP, gear down</td>
<td>64</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>clean, gear up</td>
<td>64</td>
<td>68</td>
<td>72</td>
</tr>
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</table>

In Ice: + 4-6 KIAS

**OPERATING SPEEDS KIAS for MTOM 1999 kg**

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>Flaps UP</th>
<th>Flaps APP</th>
<th>Short field TKOF with flaps APP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. control speed (VMCA)</td>
<td>76</td>
<td>71</td>
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<tr>
<td>Rotation speed</td>
<td>80</td>
<td>76</td>
<td>76</td>
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<tr>
<td>Best angle of climb (VX)</td>
<td>--</td>
<td>--</td>
<td>82</td>
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<tr>
<td>Best rate of climb (VY)</td>
<td>92</td>
<td></td>
<td>85</td>
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<tr>
<td>Best rate of climb 1-eng. (VYSE)</td>
<td>85</td>
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<tr>
<td>Operating speed in ice</td>
<td>118 - 156</td>
<td></td>
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<tr>
<td>Max. flap speed (VFE) Flaps APP</td>
<td>133</td>
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<tr>
<td>Max. flap speed (VFE) Flaps LDG</td>
<td>113</td>
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<td>Max. LG extension (VLOE)</td>
<td>188</td>
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<td>Max. LG extended (VLE)</td>
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<td>Max. LG retraction (VLOR)</td>
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<td>Approach VREF Flaps UP</td>
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<td>Approach VREF Flaps APP</td>
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<td>Min. Go-around speed Flaps UP</td>
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<tr>
<td>Max. cruising speed (VNO)</td>
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</tr>
<tr>
<td>Never exceed speed (VNE)</td>
<td>188</td>
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</table>

**MASS**

<table>
<thead>
<tr>
<th>Mass Type</th>
<th>Value</th>
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<tbody>
<tr>
<td>Max. TKOF mass</td>
<td>1999 kg</td>
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<tr>
<td>Max ZF mass</td>
<td>1835 kg</td>
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<td>Max. LDG mass</td>
<td>1999 kg</td>
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<tr>
<td>Empty mass</td>
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<tr>
<td>Max. baggage in NOSE</td>
<td>30 kg</td>
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<tr>
<td>Max. baggage in COCKPIT</td>
<td>45 kg</td>
</tr>
<tr>
<td>Max. baggage in rear EXTENSION</td>
<td>18 kg</td>
</tr>
</tbody>
</table>

**Available Power Check:**

<table>
<thead>
<tr>
<th>OAT</th>
<th>Altitude [ft]</th>
<th>-35°C</th>
<th>-20°C</th>
<th>-10°C</th>
<th>0°C</th>
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<tbody>
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<td>92%</td>
<td>89%</td>
<td>89%</td>
<td>89%</td>
</tr>
</tbody>
</table>

“Ice”: Ice accumulation and/or icing conditions
EMERGENCY + ABNORMAL CHECKLIST

For conditions to use this Emergency + Abnormal Checklist see page 1 of the Normal Checklist.

All such conditions are fully applicable also for this checklist.

2 engines out landing ............................................. page 2
G1000 Warnings .................................................... page 3

Engine

- Engine failure during take-off ..................... page 7
- Engine failure, engine shutdown in flight .... page 7
- Engine troubleshooting ............................. page 8
- Engine restart ............................................ page 9
- Oscillating RPM ...................................... page 10
- RPM overspeed ...................................... page 10

Landing Gear

- Landing with defective main gear tire........ page 10
- Landing with defective brakes ................. page 10
- Landing gear unsafe warning ................... page 11
- Manual extension of landing gear .......... page 11
- Landing gear up landing ......................... page 11

Smoke and fire

- Engine fire on ground or during take-off...... page 6
- Engine fire in flight .................................... page 6
- Electrical fire on ground ........................... page 12
- Electrical fire in flight ............................... page 12

If Oxygen System is installed

- Cabin smoke, cabin fire, above 10.000 ft... page 13
- Oxygen pressure loss above 10.000 ft ...... page 13

Other Emergencies

- Emergency descent ............................... page 13
- Unintentional flight into icing, Inadvertent icing encounter & excessive ice accumulation .... page 14
- Ice protection failure ............................ page 14
- Suspicion of carbon monoxide ............... page 14

Electrical System

- Complete electrical failure ...................... page 12
ENGINES OUT LANDING

1. Mayday call ............................................. CONSIDER 1
2. Engine masters (2) ........................................ OFF 2
3. Alternators (2) ............................................ OFF 3
4. Fuel pumps (2) .......................................... OFF 4
5. Fuel selectors (2) ....................................... OFF 5
6. Avionic master .......................................... OFF 6
7. Safety harnesses ............. FASTENED and TIGHT 7

When sure of making landing area:

8. Flaps ........................................ APP or LDG, as required 8
9. Approach speed ............................... min 84 KIAS 9
10. Power levers (2) ...................................... IDLE 10

→ Gear UP landing

   After touchdown:

11. Electric master ..................................... OFF 11

→ Gear DOWN landing

11. Gear ....................... DOWN, 3 GREENS CHECKED 11
12. Electric master ..................................... OFF 12
## G1000 WARNINGS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Page</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>L/R ALTN AMPS</td>
<td>3</td>
<td>High Current (red range)</td>
</tr>
<tr>
<td>L/R OIL PRES</td>
<td>3</td>
<td>Oil pressure low (red range)</td>
</tr>
<tr>
<td>L/R OIL TEMP</td>
<td>3</td>
<td>Oil temperature high (red range)</td>
</tr>
<tr>
<td>L/R GBOX TEMP</td>
<td>4</td>
<td>Gearbox temperature high (red range)</td>
</tr>
<tr>
<td>L/R ENG TEMP</td>
<td>4</td>
<td>Coolant temperature high (red range)</td>
</tr>
<tr>
<td>L/R FUEL TEMP</td>
<td>4</td>
<td>Fuel temperature high (red range)</td>
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<td>Fuel pressure low</td>
</tr>
<tr>
<td>L/R STARTER</td>
<td>5</td>
<td>Starter not disengaging</td>
</tr>
<tr>
<td>DOOR OPEN</td>
<td>5</td>
<td>Unlocked doors</td>
</tr>
<tr>
<td>L/R ENG FIRE</td>
<td>6</td>
<td>Engine fire on ground, during take-off, in flight</td>
</tr>
</tbody>
</table>

For other parameters “out of green range” see Abnormal Checklist

Abnormal Checklist starts at page 15

### L/R ALTN AMPS
- Check circuit breakers
- Reduce electrical load and land at nearest suitable airfield

### L/R OIL PRES
- Reduce power on affected engine
- Be prepared for loss of oil and an engine failure; land at nearest suitable airfield

### L/R OIL TEMP
- Check oil pressure
  - If oil pressure too low (outside green range):
    - Reduce power on affected engine
    - Expect loss of engine oil
    - Be prepared for an engine failure
  - If oil pressure in green range
    - Reduce power on affected engine
    - Increase airspeed
  - If oil temperature not returning to green range:
    - Be prepared for an engine failure; land at nearest suitable airfield
**L/R GBOX TEMP**

- Reduce power on affected engine
- Increase airspeed
  - If gearbox temperature still in red range:
    - Land at nearest suitable airfield
    - Be prepared for an engine failure

**L/R ENG TEMP**

- Check G1000 for **LOW COOL LVL** caution light
  - If **LOW COOL LVL** caution light OFF
    - During climb:
      - Reduce power on affected engine by 10% or more as required
      - Increase airspeed by 10 KIAS or more as required
      - If coolant temp. not returning to green range within 60”:
        - reduce power on affected engine as much as possible and increase airspeed
    - During cruise:
      - Reduce power on affected engine
      - Increase airspeed
      - If coolant temp. not returning to green range:
        - Be prepared for an engine failure; land at nearest suitable airfield
  - If **LOW COOL LVL** caution light ON
    - Reduce power on affected engine
    - Expect loss of coolant fluid
    - Be prepared for an engine failure

**L/R FUEL TEMP**

- Reduce power on affected engine
- Increase airspeed
- Transfer fuel from AUX to MAIN tank if applicable
  - If not returning to green range:
    - Land at nearest suitable airfield
**L/R FUEL PRES**

- Check fuel quantity
- **FUEL SELECTOR** of affected engine: check **ON**
- **FUEL PUMPS** of affected engine: **ON**
  - If warning remains:
    - **FUEL PUMPS** of affected engine: **OFF**
    - **FUEL SELECTOR** of affected engine: **CROSSFEED**
  - If warning still remains:
    - Be prepared for an engine failure

**L/R STARTER**

- **On ground:**
  - Affected power lever **IDLE**
  - Affected engine master **OFF**
  - Electric master **OFF**
- **In flight:**
  - Pull **LDG LT/START CB** (RH Main Bus; push again when LDG light needed)
  - Watch engine cowling and instruments
  - Land at nearest suitable airfield

**DOOR OPEN**

- Reduce airspeed immediately
- Check canopy visually
  - If open:
    - airspeed below 140 KIAS, land at nearest suitable airfield
- Check rear door visually
  - If open:
    - airspeed below 140 KIAS, land at nearest suitable airfield
    - do not try to lock door in flight
- Check front baggage doors visually
  - If one or both open:
    - reduce airspeed to keep door(s) in stable position,
      land at nearest suitable airfield
**G1000 WARNING**

**L/R ENG FIRE** OR **ENGINE FIRE OBSERVED**

**→ On ground:**
1. Engine masters (2) ..................................... OFF 1
2. Fuel selectors (2) ...................................... OFF 2
3. Mayday call ......................................... CONSIDER 3
4. Electric master ......................................... OFF 4
   - When engine and aircraft stopped:
5. Canopy .................................................. OPEN 5
   - Evacuate

**→ During Take-off**
1. Cabin heat & defrost.................................. OFF 1
2. Emergency windows (2) ........................... OPEN 2
3. Proceed according
   - **ENGINE FAILURE DURING TAKE-OFF** → page 7...

**G1000 WARNING**

**L/R ENG FIRE**

- **In flight:**
  - Evaluate the situation
  - If Engine Fire observed:
    - Proceed according
      - **ENGINE FIRE IN FLIGHT** → page 7
ENGINE FAILURE DURING TAKE-OFF

REJECTED TAKE-OFF OR EMERGENCY RE-LANDING

1. Power ...................................................... OFF 1
2. Brakes .................................................. APPLY 2
3. ATC ................................................... INFORM 3

If necessary:
4. Engine Masters (2) .................................... OFF 4
5. Fuel selectors (2) ...................................... OFF 5
6. Electric Master .......................................... OFF 6

ENGINE FAILURE DURING FLIGHT

AND ENGINE SHUTDOWN

If airspeed below Vmca:
Perform Vmc recovery procedure

Airspeed above Vmca:

1. Power .................................................. INCREASE up to MAX 1
2. Airspeed ............................................... min BLUE LINE 2
3. Landing gear .......................................... UP 3
4. Flaps .................................................... UP 4
5. Power lever (affected engine) . REDUCE TO VERIFY 5
6. Engine Master (affected engine) ................. OFF 6

Above safe altitude
7. Power (life engine) ...... up to MAX CONTINUOUS 7
8. Alternator (dead engine) ............................ OFF 8
9. Fuel pumps (dead engine) .......................... OFF 9
10. Fuel selector (dead engine) ....................... OFF 10

ENGINE FIRE IN FLIGHT

1. Cabin heat & defrost ................................. OFF 1
2. Canopy ............................................... UNLATCH if necessary 2

Max airspeed 117 KIAS

3. Shut down the engine according

↑ ENGINE SHUT DOWN - procedure ↑
ENGINE TROUBLESHOOTING

If

L OR R

ECU A AND B FAIL

simultaneously

and ALL of the following conditions exist:

- indicated LOAD unchanged
- perceived thrust is reduced
- engine noise level changes or engine running rough

1. POWER lever ......................... IDLE for 1 second  
2. POWER lever ............slowly increase to 1975 RPM  
   • If engine shows power loss during the
     POWER lever increase
3. POWER lever ......................... idle for 1 second  
4. POWER lever .........................slowly increase  
   stop prior to the RPM where former engine power loss 
   was observed

Do not increase the POWER lever past the propeller speed of 1975 RPM or the 
setting determined in step 4. An increase of engine power beyond this setting 
leads into another power loss.

With this power setting the engine can provide up to 65% at the maximum 
propeller speed of 1975 RPM

5. Land at nearest suitable airfield .......................  

End of Checklist

Otherwise:

1. Power lever (good engine) . INCREASE up to MAX  
2. Circuit breakers .........................CHECK/RESET  
   • If engine OK: continue, land ASAP  
3. VOTER switch .................SWAP between A and B  
   • If engine OK: continue, land ASAP  
4. VOTER switch ......................................... AUTO  
   • If engine OK: continue, land ASAP  
5. Fuel pumps (affected engine) ........CHECK OFF  
6. Fuel selector (affected engine) ........CROSSFEED  
   • If engine OK: continue,  
7. Fuel selector (affected engine)ON or CROSSFEED  
8. Alternate air .................................OPEN  
   • If engine OK: land as soon as practicable  
   • If engine still not OK: Be prepared for 
     ENGINE FAILURE IN FLIGHT, land ASAP
# ENGINE RESTART

**Reason for shutdown must be ascertained**

<table>
<thead>
<tr>
<th>With starter</th>
<th>Windmilling (demonstration and training not approved)</th>
</tr>
</thead>
</table>
| **15.000 ft PA** - **10.000 ft PA** | **Immediate restart**  
Max 100 KIAS  
or stationary prop,  
whichever is lower.  
**Do not engage starter when prop is windmilling.** | **Immediate restart**  
Min 125 KIAS  
Max 145 KIAS |
| **Up to 10.000 ft PA** | **OAT below –15°C:** max. engine OFF time 2 minutes  
**OAT -15 to -5°C:** max. engine OFF time 5 minutes  
**OAT above -5°C:** max. engine OFF time 10 minutes | **Min 125 KIAS**  
Max 145 KIAS |

1. Power (affected engine) ......................... IDLE
2. Fuel selector (affected engine) ............... ON
3. Alternate air ................................. AS REQUIRED
4. Alternator (affected engine) ..................... ON
5. Engine Master (affected engine) ............... ON

For restart with starter motor:
6. Starter .................. ENGAGE when prop stationary
7. Circuit breakers ........ CHECK/RESET if necessary

If engine started:
8. Power (affected engine) ....................... MODERATE
9. Engine instruments ............ check GREEN RANGE

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15.05.2020
Diamond Flight Training
Page 9
Edition # 1.1 NG-VI NXI
Does not replace the Airplane Flight Manual
OSCILLATING RPM

1. Power lever ........................................ change setting 1
   • If no success:
     Check G1000 for ECU FAIL caution
   • If ECU FAIL caution indicated:
2. VOTER switch .......................... unaffected ECU 2
   • If no success:
3. VOTER switch ................................ AUTO 3
   Land at nearest suitable airfield

RPM OVERSPEED

1. Power setting ................................. REDUCE 1
   • If no success:
     Check G1000 for ECU FAIL caution
   • If ECU FAIL caution indicated:
2. VOTER switch .......................... unaffected ECU 2
   • If no success:
3. VOTER switch ................................ AUTO 3
   Land at nearest suitable airfield
   Be prepared for ENGINE FAILURE IN FLIGHT

LANDING WITH DEFECTIVE MAIN GEAR TIRE

1. ATC .................................................. INFORMED 1
   For landing:
   Land on RWY side with “good” tire
   Keep wing on “good” side low
   Support directional control with brake

LANDING WITH DEFECTIVE BRAKES

   After touchdown (if necessary):
   1. Engine Masters (2) ......................... OFF 1
   2. Fuel selectors (2) ............................ OFF 2
   3. Electric Master ............................... OFF 3
**LANDING GEAR UNSAFE WARNING**

If on for more than 20 seconds:

1. Airspeed ................................... max 152 KIAS 1

   In cold temperature:

2. Airspeed ................................... max 110 KIAS 2

3. Gear selector ..................................... RECYCLE 3

   - If landing gear **extension** unsuccessful:
     Continue with MANUAL EXTENSION
   - If landing gear **retraction** unsuccessful:
     Consider flight with landing gear down

**MANUAL EXTENSION OF LANDING GEAR**

1. Airspeed ................................... max 152 KIAS 1

2. Gear indicator lights ................................. TEST 2

3. Electric master ..................................... CHECK ON 3

4. Bus voltage ..................................... CHECK NORMAL 4

5. Circuit breaker ..................................... CHECK 5

6. Gear selector ......................................... DOWN 6

7. Manual extension handle ........................... PULL 7

   If necessary

8. Airspeed ................................... max 110 KIAS 8

   Apply moderate yawing

9. Gear indicator lights ............... CHECK 3 GREENS 9

**LANDING GEAR UP LANDING**

(Landing gear completely retracted)

1. Approach ........................................... NORMAL 1

   If time/situation allows: just before touchdown:

2. Power lever ..................................... IDLE 2

3. Engine Masters (2) .................................... OFF 3

4. Fuel pumps (2) ..................................... OFF 4

5. Fuel selectors (2) ..................................... OFF 5

   Immediately after touchdown:

6. Electric Master ..................................... OFF 6
ELECTRICAL FIRE ON GROUND

1. Mayday call ........................................... CONSIDER 1
2. Electric Master ............................................. OFF 2
3. Power levers (2) ........................................... IDLE 3
4. Engine Masters (2) ....................................... OFF 4
5. Fuel selectors (2) ....................................... OFF 5

When engine and aircraft stopped:
6. Canopy .................................................. OPEN 6
    Evacuate

ELECTRICAL FIRE IN FLIGHT

1. Emergency switch ............................................ ON 1
2. Mayday call ........................................... CONSIDER 2
3. Avionic master ............................................. OFF 3
4. Electric master ............................................. OFF 4
5. Cabin heat & defrost .................................... OFF 5
6. Emergency windows ............. OPEN as necessary 6
7. Canopy ........................................ UNLATCH if necessary 7

Max airspeed 117 KIAS
Land at nearest suitable airfield

COMPLETE ELECTRICAL FAILURE

* Leave icing area
1. Circuit breakers ....................................... CHECK all IN 1
   • If no success:
2. Emergency switch ........................................... ON 2
3. Flood light, if necessary ........................... ON 3
4. Power ........................................................ SET 4
   according power lever position and/or engine noise
5. Flaps ........................................... VERIFY POSITION 5

Land at nearest suitable airfield
Landing gear may slowly extend
For landing apply “Manual extension of landing gear”
**CABIN SMOKE ABOVE 10.000 FT**

1. Oxygen ........................................... CHECK ON  
2. Emergency descent .................. INITIATE  
   When passing 10.000 ft  
3. Oxygen .................................................... OFF  
   Land at nearest suitable airfield

**CABIN FIRE ABOVE 10.000 FT**

1. Oxygen ............................................ PUSH OFF  
2. Emergency descent .................. INITIATE  
   Land at nearest suitable airfield

**OXYGEN PRESSURE LOSS ABOVE 10.000 FT**

1. Oxygen ............................................ PUSH OFF  
2. Oxygen pressure ............... CHECKED, note down  
3. Emergency descent .................. INITIATE  
   When passing 10.000 FT:  
4. Oxygen pressure ................... CHECK AGAIN  
   ✳ If oxygen pressure constant: .....Continue flight  
   ✳ If oxygen pressure dropped: ... Land at nearest suitable airfield

**EMERGENCY DESCENT**

1. Flaps .............................................................. UP  
2. Landing Gear ............................................. DOWN  
3. Power levers ............................................... IDLE  
4. Airspeed .............................................. AS REQUIRED
UNINTENTIONAL FLIGHT INTO ICING

Leave icing area, continue with item 1

* INADVERTENT ICING ENCOUNTER & EXCESSIVE ICE ACCUMULATION

1. De-ice system ........................................HIGH +MAX
2. Pitot heat .................................................. ON
3. Cabin heat & defrost .................................... ON
4. Alternate air .............................................. OPEN
5. Windshield de-ice ............. USE AS APPROPRIATE
6. Emergency windows .......... OPEN as required

* When de-ice system does not work properly:
Continue with ICE PROTECTION FAILURE

* ICE PROTECTION FAILURE

1. Airspeed ...................... 118 to 156 KIAS until final
2. Flaps .................................................. limited to APP position
3. Approach with residual ice........ min 90/93 KIAS
4. Landing distance ............ flaps LDG value + 20%

SUSPICION OF CARBON MONOXIDE

1. Cabin heat & defrost ....................... OFF
2. Ventilation ............................................. OPEN
3. Emergency windows ....................... OPEN
4. Airspeed ......................................... max 117 KIAS
5. Canopy ............................................ UNLATCH

Push up and lock in cooling gap position
### G1000 CAUTION LIGHTS

<table>
<thead>
<tr>
<th>Light Code</th>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>L/R FUEL LOW</td>
<td>15</td>
<td>Main tank fuel qty low</td>
</tr>
<tr>
<td>L/R AUX FUEL E</td>
<td>15</td>
<td>L/R auxiliary fuel tank empty</td>
</tr>
<tr>
<td>L/R ECU A FAIL</td>
<td>16</td>
<td>Fault in ECU A</td>
</tr>
<tr>
<td>L/R ECU B FAIL</td>
<td>16</td>
<td>Fault in ECU B</td>
</tr>
<tr>
<td>L/R VOLTS LOW</td>
<td>17</td>
<td>Bus voltage too low</td>
</tr>
<tr>
<td>L/R ALTN FAIL</td>
<td>17</td>
<td>Alternator failed</td>
</tr>
<tr>
<td>L+R ALTN FAIL</td>
<td>17</td>
<td>Both Alternators failed</td>
</tr>
<tr>
<td>STICK LIMIT</td>
<td>17</td>
<td>Stick limiting system failed</td>
</tr>
<tr>
<td>L/R COOL LVL</td>
<td>18</td>
<td>Engine coolant level low</td>
</tr>
<tr>
<td>PITOT FAIL</td>
<td>18</td>
<td>Pitot heating system failed</td>
</tr>
<tr>
<td>PITOT HT OFF</td>
<td>18</td>
<td>Pitot heating system OFF</td>
</tr>
<tr>
<td>STALL HT FAIL</td>
<td>18</td>
<td>Stall warning heating failed</td>
</tr>
<tr>
<td>STALL HT OFF</td>
<td>18</td>
<td>Stall warning heating OFF</td>
</tr>
<tr>
<td>DEICE LVL LO</td>
<td>18</td>
<td>De-icing fluid level low</td>
</tr>
<tr>
<td>DEIC PRES LO</td>
<td>18</td>
<td>De-icing pressure low</td>
</tr>
<tr>
<td>DEIC PRES HI</td>
<td>18</td>
<td>De-icing pressure high</td>
</tr>
</tbody>
</table>

### Engine instrument indications outside of green range

- **COOLANT** temperature high/low ................ page 19
- **OIL** temperature high/low........................ page 19
- **OIL** pressure high/low ............................ page 19
- **FUEL** temperature high/low ........................ page 19
- **VOLT** low ............................................ page 20
- **RPM** high ............................................. page 20

### Other abnormal situations

- **Hydraulic pump fail or continuous ops**... page 20
- **AUX fuel transfer fail** ............................ page 20

### L/R FUEL LOW

- Check fuel quantity
- Avoid uncoordinated flight
- If LH & RH quantities show remarkable difference:
  - Expect loss of fuel on side with lower indication
  - Check fuel pumps OFF
  - Use x-feed: Fuel selector to x-feed on side with LOW FUEL indication

### L/R AUX FUEL E

- L/R auxiliary fuel pump OFF
L/R ECU A or B FAIL

ON GROUND

1. VOTER switch ................................ check AUTO
2. Other ECU caution .......................... check OFF

Clearing procedure:
3. VOTER switch set to failed ECU
   Wait 5 seconds
4. VOTER switch .......................................... AUTO
   • If ECU caution persists termimate flight preparation

L/R ECU A or B FAIL

DURING FLIGHT

Remark: in case of ECU fail the system automatically switches to the other ECU

1. Alternate Air ...................................... OPEN
2. Fuel pumps LH/RH .............................. ON
3. Circuit breakers ...................... CHECK/RESET if necessary
4. VOTER switch ..................................... check AUTO
   • If ECU caution persists:
      ⇒ ECU caution clearing procedure may be used:
      BUT: In case of negative 1-eng climb rate only if a suitable landing site is available within gliding distance.
      Be prepared for loss of engine power.

5. Safe altitude ................................. CHECK
6. Airspeed .................................. Min. 85 KIAS
7. Flaps ........................................ check UP
8. Landing gear .......................... check UP
9. Other ECU caution ........................ check OFF
10. VOTER switch .......................... set to failed ECU
    Wait 5 seconds
11. VOTER switch ...................................... AUTO
    • If ECU caution persists:
       • Land at nearest suitable airfield
       • If additional engine problems are observed:
          • Go to Emergency Checklist page 8

ENGINE TROUBLESHOOTING

L OR R

ECU A FAIL and ECU B FAIL

SIMULTANEOUSLY

➢ Go to Emergency Ckl page 8 ENGINE TROUBLESHOOTING
L/R VOLTS LOW
Remark: possible reasons are
- fault in the electrical power supply
- Alternators OFF
  ➢ Continue with “Engine instrument indications outside of green range” – VOLTS low, page 20

L/R ALTN FAIL
ALTERNATOR FAILED
• If in icing conditions:
  ⇒ Leave icing area as soon as practicable
  ➢ Alternator on affected side OFF
  ➢ Monitor bus voltage
  ➢ Reduce electrical consumers
• If both alternators failed:
  ⇒ See Abnormal Checklist “Both Alternators failed”, ↓

L ALTN FAIL +
R ALTN FAIL
BOTH ALTERNATORS FAILED
Reduce all electrical equipment to a minimum:
➢ Avionic Master: OFF
➢ LH/RH Alternator: OFF
➢ Transponder: STBY
➢ Gear: DOWN
• When down and locked:
  ⇒ Pull manual gear extension handle
  ➢ Stall/Pitot heat: OFF
  ➢ All lights: OFF
  ⇒ Expect battery power to last for 30 minutes
  ⇒ Expect engine stoppage after this time
  ⇒ Land ASAP

STICK LIMIT
VARIABLE ELEVATOR STOP
SYSTEM FAILED
● 1 or 2 power levers set for MORE than 20% load:
  ⇒ Elevator variable stop is INOP
  ⇒ Do not stall in any configuration!
● 2 power levers set for LESS than 20% load:
  ⇒ Elevator variable stop always ACTIVE
  ⇒ Reduced elevator capacity
  ⇒ For approach min $V_{REF}$ 86 KIAS


**L/R COOL LVL**

- Monitor annunciations / engine instruments
- Check coolant temperature
- See “Engine instrument indications outside of green range” – COOLANT TEMPERATURE see page 19

**ENGINE COOLANT LEVEL LOW**

**PITOT FAIL**

- Check pitot heat ON, if in icing conditions
  - expect loss of airspeed indication
  
- Leave area with icing conditions (see **Emergency Checklist page 14, “Unintentional flight into icing”**)

**PITOT HT OFF**

**STALL HT FAIL**

- Switch DE-ICE to HIGH
  - If DEIC PRES LO light still ON
    - PUMP1 / PUMP2: select other pump
    - If necessary prime pump by activating windshield pump
      - If DEIC PRES LO light still ON
        - Activate ALTERNATE switch
          - If DEIC PRES LO light still ON
            - Go to Emergency Checklist page 14
              - ICE PROTECTION FAILURE

- If DEIC PRES LO light OFF
  - Continue flight
    - (de-icing fluid flow: 30 lt/hr)
    - Monitor ice protection system operation
    - Check de-icing fluid level periodically

**DEICE LVL LO**

- Maximum duration of ice protection in NORMAL mode: 30 min, in HIGH mode: 15 min

**DE-ICING FLUIS LEVEL LOW**

**DEIC PRES LO**

- Possible reduced system performance
- Filter cartridge to be replaced at next scheduled maintenance

**DE-ICING PRESSURE LOW**

- Possible reduced system performance
- Filter cartridge to be replaced at next scheduled maintenance

**DEIC PRES HI**

- Possible reduced system performance
- Filter cartridge to be replaced at next scheduled maintenance

**DE-ICING PRESSURE HIGH**
ENGINE INSTRUMENT INDICATIONS OUTSIDE OF GREEN RANGE

**COOLANT temperature high**
- Refer to Emergency Checklist page 4, “L/R ENG TEMP”

**COOLANT temperature low**
Remark: During low power descent from high altitude coolant temperature may decrease. Consider increasing power.
- Check G1000 for LOW COOLANT LVL caution light
  - If “LOW COOLANT LVL caution light” ON
    - Reduce power on affected engine
    - Expect loss of coolant fluid
    - Be prepared for an engine failure

**OIL temperature high**
- Refer to Emergency Checklist page 3, “L/R OIL TEMP”

**OIL temperature low**
- Increase power
- Reduce airspeed

**OIL pressure high**
- On ground during warm up with low oil temperature
  - Reduce power until oil press. green, continue warm up at reduced power
- During flight
  - Check oil temperature
  - Check coolant temperature
    - If temperatures within green range
      - Oil press. indication may be faulty; watch temperatures
    - If temperatures outside of green range
      - Reduce power on affected engine;
      - Land at nearest suitable airfield, be prepared for engine fail

**OIL pressure low**
- Refer to Emergency Checklist page 3, “L/R OIL PRES”

**FUEL temperature high**
- Refer to Emergency Checklist page 4, “L/R FUEL TEMP”

**FUEL temperature low**
- Increase power on affected engine
- Reduce airspeed
  - If not returning to green range:
    - Be prepared for an engine failure;
    - Land at nearest suitable airfield
VOLTS low

❖ On ground:
  ⇒ Check alternators ON
  ⇒ Check circuit breakers
  ● If LOW VOLTS CAUTION still indicated on the G1000:
    ⇒ Discontinue operation; terminate flight preparation

❖ In flight:
  ⇒ Check alternators ON
  ⇒ Check circuit breakers
  ⇒ Switch off unnecessary electrical equipment
  ● If LOW VOLTS CAUTION still indicated on the G1000:
    ⇒ Apply L/R ALTN FAIL caution procedure, page 17

RPM high

➢ Reduce power on affected engine
➢ Keep RPM in green range with appropriate power lever setting
● If problem not solved:
  ⇒ Refer to Emergency Checklist page 10 “RPM overspeed”
  ⇒ Land at nearest suitable airfield

OTHER ABNORMAL SITUATIONS

Hydraulic pump: failure or continuous operation

➢ Check gear indication lights
➢ Prepare for manual landing gear extension

L/R Auxiliary fuel XFER FAIL

➢ Both AUX PUMPS: OFF
➢ Check fuel pumps OFF
➢ Check fuel quantity
➢ Use X-feed to keep main tank fuel unbalance within 1 USG
➢ Switch remaining AUX PUMP ON
➢ Use X-feed to keep main tank fuel unbalance within 1 USG
➢ Amend flight plan to allow for reduced amount of available fuel