

**Cessna 172  
Skyhawk**

# **Checklist**

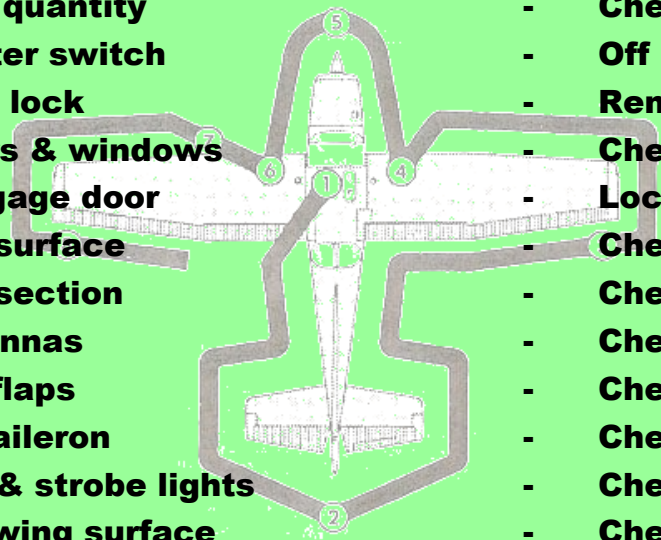
**LN-NFJ**

**SFK 2014**



# GROUND Exterior Checklist

- |  |   |         |
|--|---|---------|
| 1. Fuel (wings & filter)                 | - | Drained |
| 2. Documents                             | - | Checked |
| 3. Fire extinguisher, first aid sur. kit | - | Checked |
| 4. Magnetos                              | - | Off     |
| 5. Master switch                         | - | On      |
| 6. Flaps                                 | - | Down    |
| 7. Fuel quantity                         | - | Checked |
| 8. Master switch                         | - | Off     |
| 9. Gust lock                             | - | Removed |
| 10. Doors & windows                      | - | Checked |
| 11. Baggage door                         | - | Locked  |
| 12. Tail surface                         | - | Checked |
| 13. Tail section                         | - | Checked |
| 14. Antennas                             | - | Checked |
| 15. R.H flaps                            | - | Checked |
| 16. R.H aileron                          | - | Checked |
| 17. Nav & strobe lights                  | - | Checked |
| 18. R.H wing surface                     | - | Checked |
| 19. R.H main wheel & brakes              | - | Checked |
| 20. Fuel quantity R.H wing               | - | Checked |
| 21. Fuel cap R.H wing                    | - | Secured |
| 22. Oil quantity (6 - 8 / 5 - 7 quarts)  | - | Checked |
| 23. Landing & taxi lights                | - | Checked |



Sjekk for type



# GROUND Exterior Checklist

- 24. Airfilter - Checked
- 25. Fanbelt & generator - Checked
- 26. Propeller & spinner - Checked
- 27. Nosewheel strut & tire link - Checked
- 28. Engine cowling - Secured
- 29. Static port - Checked
- 30. Fuel quantity L.H wing - Checked
- 31. Fuel cap L.H wing - Secured
- 32. Pitot tube - Checked
- 33. Stall warning - Checked
- 34. L.H fuel vent - Checked
- 35. Left wing surface - Checked
- 36. Nav & strobe lights - Checked
- 37. L.H aileron - Checked
- 38. L.H flaps - Checked
- 39. L.H main wheel & brakes - Checked

### LIGHTS:

- 40. Landing & taxi lights - Checked
- 41. Nav & strobe lights - Checked

### PASSENGER BRIEFING:

- 42. Evacuation, life jackets - Completed
- 43. Weight & balance - Checked

**Checklist Completed**

# GROUND START

## Before / Starting engine

- |                                      |   |                          |
|--------------------------------------|---|--------------------------|
| <b>1. Preflight inspection</b>       | - | <b>Completed</b>         |
| <b>2. Seats &amp; belts</b>          | - | <b>Locked &amp; on</b>   |
| <b>3. Parking brake</b>              | - | <b>Set</b>               |
| <b>4. Flight controls</b>            | - | <b>Free / correct</b>    |
| <b>5. Trim</b>                       | - | <b>Checked &amp; set</b> |
| <b>6. Fuel selector</b>              | - | <b>Checked / both</b>    |
| <b>7. Circuit breakers</b>           | - | <b>Checked in</b>        |
| <b>8. Avionics</b>                   | - | <b>Off</b>               |
| <b>9. Primer (hot - cold)</b>        | - | <b>2 - 6, locked</b>     |
| <b>10. Mixture</b>                   | - | <b>Rich</b>              |
| <b>11. Throttle</b>                  | - | <b>1/2 cm open</b>       |
| <b>12. Carburetor heat</b>           | - | <b>Cold</b>              |
| <b>13. Doors &amp; windows</b>       | - | <b>Closed / locked</b>   |
| <b>14. Propeller area</b>            | - | <b>Clear</b>             |
| <b>15. Master switch</b>             | - | <b>On</b>                |
| <b>16. Beacon</b>                    | - | <b>On</b>                |
| <b>17. Ignition</b>                  | - | <b>Start</b>             |
| <b>18. Throttle</b>                  | - | <b>1000 RPM</b>          |
| <b>19. Oil pressure</b>              | - | <b>Checked (30-60)</b>   |
| <b>20. Flaps</b>                     | - | <b>Checked &amp; up</b>  |
| <b>21. Radios (ATIS - GND - TWR)</b> | - | <b>On</b>                |
| <b>22. Navigation lights</b>         | - | <b>On if necessary</b>   |
| <b>23. Altimeters (QNH)</b>          | - | <b>Set</b>               |
| <b>24. Gyros</b>                     | - | <b>Set</b>               |

**Checklist Completed**

**S.4**

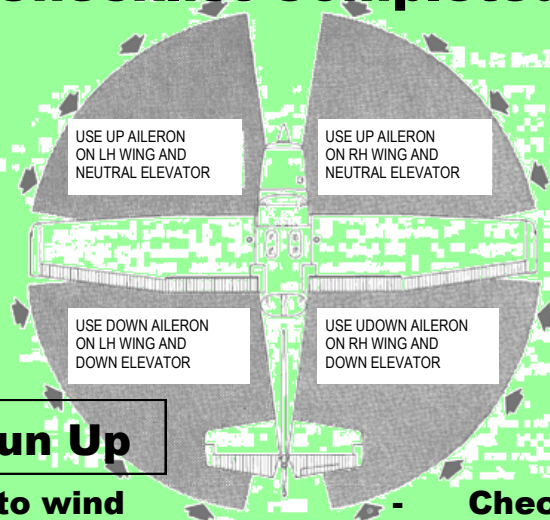


# GROUND TAXI / RUN UP

## TAXI

- |                       |   |                  |
|-----------------------|---|------------------|
| 1. Taxilight          | - | On, if necessary |
| 2. Brakes             | - | Checked          |
| 3. Flight instruments | - | Checked          |

## Checklist Completed



## Engine Run Up

- |                                  |   |               |
|----------------------------------|---|---------------|
| 1. Nose into wind                | - | Checked       |
| 2. Brakes                        | - | Checked & set |
| 3. Area free                     | - | Checked       |
| 4. Throttle                      | - | 1700 RPM      |
| 5. Oil pressure/temperature      | - | Checked       |
| 6. Suction (4,6 - 5,4 green)     | - | Checked       |
| 7. Ampermeter                    | - | Checked       |
| 8. Magnetos max 125 drop +/- 50- | - | Checked       |
| 9. Carburetor heat (RPM drop)    | - | Checked       |
| 10. Throttle idle                | - | 650 - 850 RPM |
| 11. Throttle                     | - | 1000 RPM      |

## Checklist Completed

S.5



# GROUND TAKE-OFF

## Before Take-Off

- |                                 |   |          |
|---------------------------------|---|----------|
| 1. Magnetos                     | - | On both  |
| 2. Master                       | - | On both  |
| 3. Carburetor heat              | - | Off      |
| 4. Mixture                      | - | Rich     |
| 5. Fuel selector                | - | On Both  |
| 6. Flaps                        | - | 0 - 10°  |
| 7. Instruments                  | - | Checked  |
| 8. Gyros (comp. Set to RWY HDG) | - | Set      |
| 9. Transponder                  | - | On       |
| 10. Departure briefing          | - | Reviewed |

- Engine failure during take-off
- Outbound routing

- |                   |   |        |
|-------------------|---|--------|
| 11. Take-off time | - | Logged |
|-------------------|---|--------|

## Checklist Completed

## CLIMB

## AIRBORNE

- |                       |   |               |
|-----------------------|---|---------------|
| 1. Flaps              | - | Up (300-500') |
| 2. Mixture            | - | Lean as req.  |
| 3. Engine instruments | - | Checked       |
| 4. Altimeters         | - | Set           |
- V<sub>x</sub>** = **64 KIAS** (Best rate of climb speed)  
**V<sub>y</sub>** = **78 KIAS** (Best angle of climb speed)

## Checklist Completed

S.6



# AIRBORNE CRUISE

## CRUISE

- |                          |   |              |
|--------------------------|---|--------------|
| 1. Power                 | - | Set          |
| 2. Mixture               | - | Lean as req. |
| 3. Engine instruments    | - | Checked      |
| 4. Fuel quantity/balance | - | Checked      |
| 5. Heading               | - | Set          |

## Checklist Completed

## AIRWORK / STALL CHECK

- |                        |   |                |
|------------------------|---|----------------|
| 1. Loose articles      | - | Secured        |
| 2. Altitude            | - | Min. 3000' AGL |
| 3. Forced landing area | - | Located        |
| 4. Seat belts          | - | On             |
| 5. Fuel selector       | - | On both        |
| 6. Mixture             | - | Rich           |
| 7. Instruments         | - | Checked        |
| 8. Weight & balance    | - | Within limits  |
| 9. Other traffic       | - | Checked        |
| 10. Carburetor heat    | - | As req.        |
| 11. Clearance          | - | Received       |

## Checklist Completed

S.7



# AIRBORNE PRE-LANDING

## APPROACH

- |                     |   |          |
|---------------------|---|----------|
| 1. Atis             | - | Received |
| 2. Altimeters (QNH) | - | Set      |
| 3. Heading          | - | Set      |
| 4. Landing lights   | - | On       |

**Checklist Completed**

## PRE-LANDING

- |                       |   |                             |
|-----------------------|---|-----------------------------|
| 1. Engine instruments | - | Checked                     |
| 2. Mixture            | - | Rich                        |
| 3. Fuel selector      | - | On both                     |
| 4. Landing lights     | - | On                          |
| 5. Seats / belts      | - | Adjust/lock                 |
| 6. Flaps              | - | Set                         |
| 7. Carburetor heat    | - | On, before closing throttle |

**Checklist Completed**





# AIRBORNE PRE-LANDING

## DOWNWIND CHECK

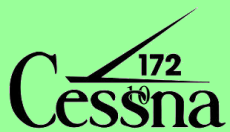
- |   |   |         |
|---|---|---------|
| 1. Primer                                   | - | Locked  |
| 2. Magnetos                                 | - | On both |
| 3. Master switch                            | - | On both |
| 4. Landing lights                           | - | As req. |
| 5. Carburetor heat ( <b>&lt; 2000 RPM</b> ) | - | On      |
| 6. Mixture                                  | - | Rich    |
| 7. Fuel selector                            | - | On both |
| 8. Brake pressure                           | - | Checked |
| 9. Harness                                  | - | Checked |
| 10. Doors                                   | - | Locked  |

**Checklist Completed**

## GO AROUND

- |                    |   |              |
|--------------------|---|--------------|
| 1. Throttle        | - | Full power   |
| 2. Carburetor heat | - | Off          |
| 3. Mixture         | - | Rich         |
| 4. Flaps           | - | Carefully up |
| 5. Trim            | - | Set          |

**Checklist Completed**



# GROUND SHUT DOWN

## AFTER LANDING

- |                    |   |         |
|--------------------|---|---------|
| 1. Carburetor heat | - | Off     |
| 2. Flaps           | - | Up      |
| 3. Transponder     | - | Off     |
| 4. Lights          | - | As req. |
| 5. Radios          | - | As req. |
| 6. Landing time    | - | Logged  |

**Checklist Completed**

## SHUT DOWN

- |                        |   |           |
|------------------------|---|-----------|
| 1. Throttle            | - | 1000 RPM  |
| 2. Radios              | - | Off       |
| 3. Lights (nav - taxi) | - | Off       |
| 4. Throttle            | - | 1000 RPM  |
| 5. Mixture             | - | Full lean |
| 6. Beacon light        | - | Off       |
| 7. Magnetos            | - | Off       |
| 8. Master switch       | - | Off       |
| 9. All Switches        | - | Off       |
| 10. Gust lock          | - | Installed |

**Checklist Completed**

S.10

# **EMERGENCY IN FLIGHT**

- **Nose down**
  - **Trim best glide 70 kts**

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- **Select field**
  - **Set Course**

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- **Identify**
  - **Primer**
  - **Magnetos**
  - **Master switch**
  - **Carburetor heat**
  - **Mixture**
  - **Fuel selector**

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- **Radio**
  - **Mayday call**
  - **ELT on**

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- **Transponder**
  - **7700**



# EMERGENCY ON GROUND

## FIRE DURING START UP

- |             |   |                   |
|-------------|---|-------------------|
| 1. Starter  | - | Continue cranking |
| 2. Mixture  | - | Idle cut off      |
| 3. Throttle | - | Full open         |

### If fire continues:

- |                      |   |              |
|----------------------|---|--------------|
| 4. Fuel selector     | - | Off          |
| 5. Magnetos          | - | Off          |
| 6. Master switch     | - | Off          |
| 7. Aircraft          | - | Evacuate     |
| 8. Fire extinguisher | - | As necessary |

## Checklist Completed

## ENGINE FAILURE ON RWY

- |             |   |               |
|-------------|---|---------------|
| 1. Throttle | - | Idle          |
| 2. Brakes   | - | Apply to stop |

### If insufficient runway:

- |                  |   |              |
|------------------|---|--------------|
| 3. Mixture       | - | Idle cut off |
| 4. Fuel selector | - | Off          |
| 5. Master switch | - | Off          |
| 6. Magnetos      | - | Off          |

## Checklist Completed



# EMERGENCY TAKE-OFF

## ENGINE FAILURE AFTER TAKE-OFF

- |                      |   |                |
|----------------------|---|----------------|
| 1. Speed (nose down) | - | 70 kts         |
| 2. Throttle          | - | Idle           |
| 3. Flaps             | - | As req         |
| 4. Land              | - | Straight ahead |

### If insufficient runway:

- |                  |   |              |
|------------------|---|--------------|
| 5. Mixture       | - | Idle cut off |
| 6. Fuel selector | - | Off          |
| 7. Master switch | - | Off          |
| 8. Magnetos      | - | Off          |

**Make shallow turns to avoid obstacles.  
Min. altitude for 180° turns 700' AGL.**

## Checklist Completed

# EMERGENCY IN FLIGHT

## ENGINE FAILURE IN FLIGHT

- |                              |   |                        |
|------------------------------|---|------------------------|
| <b>1. Fly the aircraft</b>   | - | <b>70 kts</b>          |
| <b>2. Landing area</b>       | - | <b>Select</b>          |
| <b>3. Primer</b>             | - | <b>Locked</b>          |
| <b>4. Magnetos</b>           | - | <b>Checked</b>         |
| <b>5. Carburetor heat</b>    | - | <b>On</b>              |
| <b>6. Throttle</b>           | - | <b>Idle</b>            |
| <b>7. Mixture</b>            | - | <b>Rich</b>            |
| <b>8. Fuel selector</b>      | - | <b>On both</b>         |
| <b>9. Mayday call</b>        | - | <b>Completed</b>       |
| <b>10. Passenger</b>         | - | <b>Briefed</b>         |
| <b>11. Seats &amp; belts</b> | - | <b>Locked &amp; on</b> |
| <b>12. ELT</b>               | - | <b>On</b>              |
| <b>13. Transponder</b>       | - | <b>7700</b>            |

**If time and altitude permits:**

### Prop rotating

- |   |   |                       |
|---|---|-----------------------|
| <b>14. Mixture</b>                      | - | <b>Idle cut off</b>   |
| <b>15. Throttle</b>                     | - | <b>Full 3 - 5 sec</b> |
| <b>16. Mixture (when engine starts)</b> | - | <b>Rich</b>           |

### Prop not rotating

- |   |   |                     |
|---|---|---------------------|
| <b>17. Mixture</b>                      | - | <b>Idle cut off</b> |
| <b>17. Throttle</b>                     | - | <b>1 cm open</b>    |
| <b>18. Ignition</b>                     | - | <b>Start</b>        |
| <b>19. Mixture (when engine starts)</b> | - | <b>Rich</b>         |



# EMERGENCY IN FLIGHT

When unable to restart:

## EMERGENCY LANDING

- |                                 |   |              |
|---------------------------------|---|--------------|
| 1. Mixture                      | - | Idle cut off |
| 2. Fuel selector                | - | Off          |
| 3. Magnetos                     | - | Off          |
| 4. Master (when flaps selected) | - | Off          |
| 5. Doors                        | - | Open         |

**Checklist Completed**

## ENGINE FIRE IN FLIGHT

- |                      |   |              |
|----------------------|---|--------------|
| 1. Fuel selector     | - | Off          |
| 2. Mixture           | - | Idle cut off |
| 3. Throttle          | - | Full open    |
| 4. Cabin heat & vent | - | Closed       |

Continue with emergency landing checklist:

**Checklist Completed**



# EMERGENCY ON GROUND

## EMERGENCY EXIT ON GROUND

1. Personal equipment - Disconnect
2. Doors - Open
3. Aircraft (if possible pax. first) - Abandon

**Checklist Completed**

## LOSS OF OIL PRESSURE

1. Power - Reduce
2. Oil pressure - Checked

**If unable to bring back oil pressure within limits:**

**LAND A.S.A.P**

**Checklist Completed**





# EMERGENCY ELECTRICAL

## ELECTRICAL FIRE

- |                        |   |            |
|------------------------|---|------------|
| 1. Master switch       | - | Off        |
| 2. Electrical switches | - | All off    |
| 3. Fire                | - | Extinguish |
| 4. Master switch       | - | On         |
| 5. Radio               | - | On         |

**Checklist Completed**

## IF VOLTAGE DROP

- |                           |   |                   |
|---------------------------|---|-------------------|
| 1. Electrical load        | - | Reduce            |
| 2. Alt output / alt field | - | Reset after 3 min |

### If circuit breakers are not tripped:

- |               |   |            |
|---------------|---|------------|
| 3. alternator | - | Off 30 sec |
| 4. Alternator | - | On, check  |

### If no charge:

- |                    |   |     |
|--------------------|---|-----|
| 5. Alternator      | - | Off |
| 6. Electrical load | - | Min |

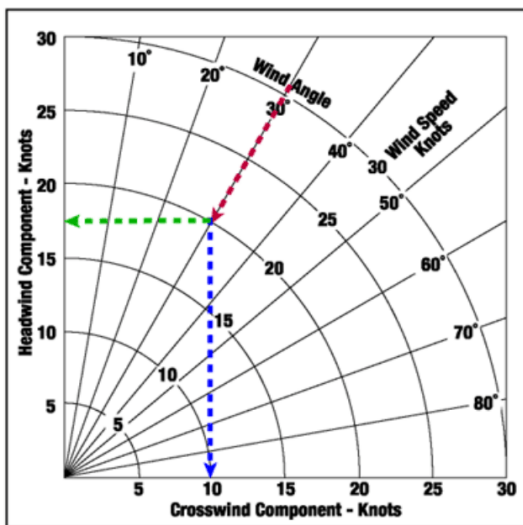
### LAND A.S.A.P

**Checklist Completed**

# PERFORMANCE

**NOTE:**

**Maximum demonstrated crosswind velocity is 15 knots**



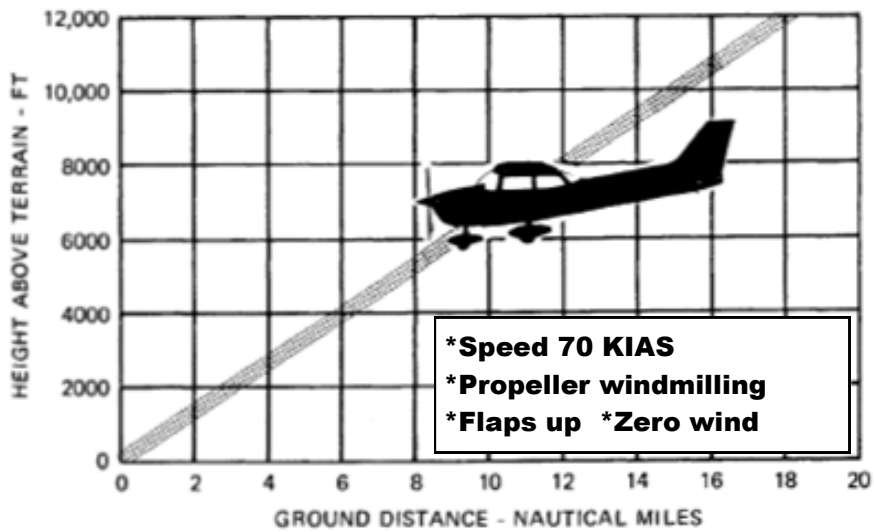
**Wind 20 kts, 30 degrees off CL gives headwind component 17 kts and x-wind component 10 kts.**

**Hastighet / distanse**

<b>GS</b>			
<b>30</b>	<b>kts</b>	<b>=</b>	<b>0,5 NM / min</b>
<b>60</b>	<b>kts</b>	<b>=</b>	<b>1,0 NM / min</b>
<b>90</b>	<b>kts</b>	<b>=</b>	<b>1,5 NM / min</b>
<b>120</b>	<b>kts</b>	<b>=</b>	<b>2,0 NM / min</b>
<b>150</b>	<b>kts</b>	<b>=</b>	<b>2,5 NM / min</b>
<b>180</b>	<b>kts</b>	<b>=</b>	<b>3,0 NM / min</b>
<b>210</b>	<b>kts</b>	<b>=</b>	<b>3,5 NM / min</b>

# PERFORMANCE GLIDE / CLIMB

## Best glide speed



## Rate of climb

Weight LBS	Press ALT FT	Climb speed KIAS	RATE OF CLIMB - FPM			
			-20°C	0°C	20°C	40°C
2300	S.L	78	755	695	630	565
	2000	76	655	595	535	470
	4000	74	555	500	440	380
	6000	72	460	405	350	290
	8000	70	365	310	255	200
	10.000	68	270	215	165	...
	12.000	66	175	125	...	...



# PERFORMANCE YOUR AIRPLANE

**FLY TYPE = C172M**

**FLY REG = LN-NFJ**





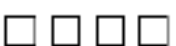
## SPEED

1.  $V_A$  = 97 KIAS      **Maneuvering speed**
2.  $V_{FE}$  = 85 KIAS      **Flap extended speed**
3.  $V_{NO}$  = 128 KIAS      **Maximum structural cruising speed**
4.  $V_{NE}$  = 160 KIAS      **Never exceed speed**
5.  $V_S$  = 47 KIAS      **Stall speed**
6.  $V_{SO}$  = 41 KIAS      **Stall speed / min. steady flight speed in landing configuration**
7.  $V_X$  = 64 KIAS      **Best angle of climb speed**
8.  $V_Y$  = 78 KIAS      **Best rate of climb speed**

## X-WIND

**Max demonstrated X-wind = 15 kts**

# SIGNALS FOR AERODROME TRAFFIC

Light Signal	Meaning to Aircraft in Flight	Meaning to Aircraft on Aerodrome
STEADY GREEN 	Authorized to land if pilot satisfied no collision risk exists	Authorised to take-off if pilot satisfied no collision risk exists
STEADY RED 	Give way to other aircraft and continue circling	Stop
GREEN FLASHES 	Return, wait for permission to land	Authorised to taxi IF pilot satisfied no collision risk exists
RED FLASHES 	<ul style="list-style-type: none"> <li>- Do not land,</li> <li>- Aerodrome not available for landing</li> </ul>	Taxi clear of landing area in use
WHITE FLASHES 	Land at this aerodrome, after receiving continuous green light	Return to starting point on aerodrome

**Red rocket = Do not land!**