

# ASI Checklist

## Preflight Inspection Cockpit

Hobbs/Tach/Log	<b>Record</b>
Aircraft Docs (ARROW)	<b>Check</b>
Control/Gust Lock	<b>Remove</b>
Ignition	<b>Off</b>
Avionics Master Switch	<b>Off</b>
Master Switch	<b>On</b>
Fuel Quantity Indicators	<b>Check</b>
Flaps	<b>Extend</b>
Master Switch	<b>Off</b>
Fuel Selector Valve	<b>Both</b>
Alternate Static	<b>Off</b>
Seat	<b>Adjust Height</b>
Headset/Gear	<b>Attach/Stow</b>

## Fuel, Tie-Downs, Covers, and Chocks

Fuel Samples	<b>Sump/View</b>
Fuel Quantity	<b>Visually Verify</b> <b>(Return fuel sample to tank)</b>
Tie-Downs	<b>Remove</b>
Covers	<b>Remove</b>
Chocks	<b>Remove</b>

## Fuselage and Empennage

Baggage Door	<b>Closed &amp; Locked</b>
Rivets & Surfaces	<b>Check</b>
Elevator & Rudder	<b>Free &amp; Secure</b>
<b>Check Control Surfaces/Cables</b>	
<b>Visually Inspect Overall Aircraft</b>	
Antennas/Lights/Fuel Caps/ Wing Tops/Main Gear	<b>Check</b>
Trim Tab	<b>Check Security</b>
Inspection Port Covers	<b>Secure</b>

## Right Wing and Main

Main Gear	<b>Check Condition</b>
Brakes	<b>Visually Inspect</b>
Flap	<b>Secure</b>
Aileron	<b>Free and Secure</b>
Outboard/Leading Edges	<b>Check</b>
(Wing Tie-Down)	<b>Removed</b>
(Fuel Tank Sump)	<b>Sampled</b>
(Fuel Quantity)	<b>Checked</b>
(Fuel Filler Cap)	<b>Secured</b>

# Cessna 172N

## Nose

Engine oil level (4½-6)	<b>Check</b>
Fuel Strainer	<b>Sump</b>
Cowling/Alternator belt	<b>Check</b>
Propeller & Spinner	<b>Check</b>
Landing/Taxi Lights	<b>Check</b>
Air Intake	<b>Check</b>
Nose Wheel Strut & Tire	<b>Check</b>
Static Port	<b>Check</b>

## Left Wing and Main

Main Gear	<b>Check Condition</b>
Brakes	<b>Visually Inspect</b>
Pitot Tube	<b>Unobstructed</b>
Fuel Tank Vent	<b>Unobstructed</b>
Stall Warning	<b>Unobstructed</b>
Outboard/Leading Edges	<b>Check</b>
Aileron	<b>Free and Secure</b>
Flap	<b>Secure</b>
(Wing Tie-Down)	<b>Removed</b>
(Fuel Tank Sump)	<b>Sampled</b>
(Fuel Quantity)	<b>Checked</b>
(Fuel Filler Cap)	<b>Secured</b>

## Before Starting Engine

Preflight inspection	<b>Complete</b>
Passenger Briefing	<b>Complete</b>
Seats/Seatbelts	<b>Adjust &amp; Lock</b>
Circuit Breakers	<b>Check In</b>
Avionics Master Switch	<b>Off</b>
Fuel Selector Valve	<b>Both</b>

## Starting Engine

Brakes	<b>Hold</b>
Mixture	<b>Full Rich</b>
Carb Heat	<b>Off/Cold</b>
Nav Lights/Beacon	<b>On</b>
Propeller Area	<b>Clear</b>
Master Switch	<b>On</b>
Prime	<b>As required; In &amp; Locked</b>
Throttle	<b>Pump/Open 1/8"</b>
Ignition	<b>Start</b>
Throttle	<b>Adjust to 1000 rpm</b>
Oil Pressure	<b>Check</b>
Avionics Master Switch	<b>On</b>
Radios	<b>On 123.0 for L38</b>
Transponder	<b>1200 STBY</b>
Flaps	<b>Retract</b>

# Skyhawk

Heading Indicator	<b>Set</b>
ATIS/AWOS/ASOS	<b>Obtain</b>
Altimeter	<b>Set</b>
Clearance & Taxi	<b>Call</b>

## Before Takeoff

Brakes	<b>Hold</b>
Cabin Doors	<b>Closed &amp; Locked</b>
Flight controls	<b>Free &amp; Correct</b>
Elevator Trim	<b>Set for TAKEOFF</b>
Fuel Selector Valve	<b>Both</b>
Mixture	<b>Full Rich</b>
Throttle	<b>1700 rpm</b>
Magnetos (R, L, Both)	<b>Check</b>
Carb Heat (On, Off)	<b>Check</b>
Suction gage	<b>Check</b>
Flt Instruments (6)	<b>Check</b>
Engine Instruments	<b>Check</b>
Ammeter	<b>Check</b>
Throttle	<b>1000 rpm</b>
Throttle Friction Lock	<b>Adjust</b>
Transponder	<b>1200 ALT</b>
Strobe Lights	<b>On</b>

## Normal Takeoff

Flaps	<b>Up</b>
Carb heat	<b>Off/Cold</b>
Transponder	<b>1200 ALT</b>
Trim	<b>Set for TAKEOFF</b>
Throttle	<b>Full &amp; HOLD</b>
Tach, Oil, Airspeed	<b>Check</b>
Rotate	<b>55 KIAS</b>
Climb	<b>70-80 KIAS</b>

## Cruise

Pitch	<b>Set</b>
Throttle	<b>2200-2700 rpm</b>
Trim	<b>Set</b>
Mixture	<b>Lean as Required</b>
Instruments	<b>Check</b>

## Approach and Descent

ATIS/AWOS/ASOS	<b>Obtain</b>
Flight Instruments	<b>Check &amp; Set</b>
Radios	<b>Check &amp; Set</b>
Landing Light	<b>On</b>

## Before Landing

Seatbelts	<b>Fastened</b>
Fuel Selector Valve	<b>Both</b>

# N739MJ

Mixture	<b>Full Rich</b>
Throttle	<b>Set</b>
Carb Heat	<b>On</b>
Landing Light	<b>Check On</b>

## Final Approach

Airpoint	<b>Maintain</b>
Airspeed	<b>65-75 KIAS (Flaps Up)</b> <b>60-70 KIAS (Flaps Dn)</b>

## Clear of Runway

Flaps	<b>Up</b>
Carb Heat	<b>Off/Cold</b>
Transponder	<b>STBY</b>
Strobes	<b>Off</b>
Landing Light	<b>Off</b>

## Engine Shutdown

Avionics Master Switch	<b>Off</b>
Mixture	<b>Idle/Cut-Off</b>
Ignition Switch	<b>Off</b>
Key	<b>Out &amp; Visible</b>
Master switch	<b>Off</b>

## Parking/Securing

Tie-Downs/Chocks	<b>Secure</b>
Lead Edges/Wind Screen	<b>Clean</b>
Control/Gust Lock	<b>Install</b>
Hobbs/Tach	<b>Record</b>
Doors/Windows	<b>Secure</b>

## V-Speeds (KIAS)

Rotate	V <sub>r</sub>	55
Normal Climb	V <sub>climb</sub>	70-85
Max Angle Climb	V <sub>x</sub>	59
Max Rate Climb (Sea Level)	V <sub>y</sub>	73
Maneuvering Max	V <sub>a</sub>	97
Flaps	V <sub>fe</sub>	85
Never Exceed	V <sub>ne</sub>	160
Stall (Clean)	V <sub>s</sub>	47
Stall (w/Flaps)	V <sub>so</sub>	41
Final Approach	Flaps	60-70
	No Flaps	65-75
<b>Max Glide</b>		<b>65</b>

# Procedures

## Short Field Take-Off

Taxi **MAX Runway**  
 Brakes **Hold**  
 Flaps **10°**  
 Throttle **Full, Check RPM**  
 Brakes **Release**  
 Climb V<sub>x</sub> **59 KIAS**  
 Flaps **Retract When Clear**  
 Climb V<sub>y</sub> **73 KIAS**

## Short Field Landing

Approach **Steep/60 KIAS**  
 Flaps **40°**  
 Throttle **Maintain Glide**  
 Touchdown **Power Off**  
 Flaps **Up**  
 Elevator **Full Up**  
 Braking **Heavy as Required**

## Soft Field Take-Off

Flaps **10°**  
 Taxi **Keep Rolling/Nose Up**  
 Throttle **Full**  
 Liftoff **Level in Ground Effect**  
 Climb V<sub>x</sub> **59 KIAS**  
 Flaps **Retract When Clear**  
 Climb V<sub>y</sub> **73 KIAS**

## Soft Field Landing

Approach **Normal**  
 Flaps **40°**  
 Throttle **Maintain Glide/Cushion**  
**Touchdown w/Burst of Power**  
 Touchdown **Main First, Softly**  
 Landing Roll **Nose Wheel Up**  
 Elevator **Up**  
 Braking **Gently, As Required**

## Go-Around

Throttle **Full**  
 Carb Heat **Off/Cold**  
 Flaps **20°**  
 Climb **55 KIAS**  
 Flaps **10°**  
 Climb **60 KIAS**  
 Flaps **Up**  
 Climb **>60 KIAS**

# Emergency

## Engine Failure

### TAKEOFF

Throttle **Idle**  
 Brakes **Apply**  
 Flaps **Retract**  
 Mixture **IDLE cut-off**  
 Ignition **Off**  
 Master switch **Off**

### IMMEDIATELY AFTER TAKEOFF

Airspeed **65 KIAS (Flaps UP)**  
**60 KIAS (Flaps DN)**  
 Mixture **Idle Cut-off**  
 Fuel Selector Valve **Off**  
 Ignition **Off**  
 Flaps **As Required**  
 Master switch **Off**  
 Cabin Doors **Unlatch**  
 Land **Straight Ahead**

### DURING FLIGHT

Airspeed **65 KIAS**  
 Best Field **Identify**  
 Checklist to Restart:  
 Fuel Selector Valve **Both**  
 Primer **In & Locked**  
 Mixture **Rich**  
 Ignition **BOTH (or START)**

### Checklist for Forced Landing:

Airspeed **65 KIAS (flaps UP)**  
**60 KIAS (flaps DN)**  
 Mixture **Idle Cut-off**  
 Fuel Selector Valve **Off**  
 Ignition **Off**  
 Flaps **As Required**  
 Mayday **Transmit 121.5**  
 Mayday **Squawk 7700**  
 Master switch **Off**  
 Cabin Doors **Unlatch**  
 Touchdown **Tail Low**

## Landing with Flat Main

Approach **Normal**  
 Touchdown **Good Tire First;**  
**Hold off Flat Tire As Able**

## Carburetor Icing

Throttle **Full**  
 Carb Heat **On**  
 Mixture **Adjust**

# Emergency

## Engine Roughness

Magnetos **Check**  
 Mixture **Lean as Necessary**

## Engine Fire During Start

Crank **Continue**  
 Power **1700 RPM (2 Min)**  
 Engine **Shut Down and Inspect**

## Engine Fire During Flight

Mixture **Idle Cut-off**  
 Fuel Selector Valve **Off**  
 Master Switch **Off**  
 Cabin Heat/Air **Off**  
 Airspeed **100 KIAS**  
 Forced Landing **Execute**

## Electrical Fire in Flight

Master Switch **Off**  
 Avionics Power Switch **Off**  
 Other Switches **Off**  
 Vents/Cabin Air/Heat **Off**  
 Fire Extinguisher **Activate**  
*Ventilate Cabin After Fire Ext Use*  
*Reintroduce Load At Minimum*  
*Land As Soon As Practical*

## Electrical Overload

Avionics Master Switch **Off**  
 Master Switch **Off**  
 Master Switch **On**  
 Over-voltage light **Off**  
 Avionics Master Switch **On**  
*If still on, TERMINATE flight ASAP*

## Ammeter Shows Discharge

Alternator **Off**  
*Reduce Load to Minimum*  
*Land As Soon As Practical*

# Reference

## Fuel

100LL (Blue)  
 43 Gallons Total (21.5 each wing)  
 40 Gallons Useable (240 LBS)  
 4.1 HRS endurance at 75% HP,  
 8000' MSL, w/45 MIN Reserve

## Oil

SAE50 (Aeroshell 100+)  
 4 QTS MIN – 7 QTS MAX  
 4 ½ - 6 QTS NORMAL OPS  
 25-100 PSI Oil Pressure  
 245 Degrees F MAX Oil Temp

## Engine

1700 RPM Magnetos Check  
 125 RPM MAX Drop  
 50 RPM Differential in Mag's  
 2700 RPM MAX for TakeOff

## Weight and Balance

2300 MAX Weight  
 120 LBS MAX Baggage  
 1445.4 LBS Empty Wt  
 855 LBS Useful Load

## Demonstrated Crosswind Component

15 KTS

## Light Signals:

Signal	On Ground	In Flight
Steady <b>Green</b>	Takeoff	Land
Flashing <b>Green</b>	Taxi	Return to land
Steady <b>Red</b>	Stop	Give Way
Flashing <b>Red</b>	Clear Runway	Do Not Land
Flashing <b>White</b>	Return to Ramp	--
<b>Red/Green</b> Alternating	WARNING – USE CAUTION	