Cessna-172M N172JD
(10-26-23)

***Check Fuel Quantity**

Preflight Cabin

1.	Pitot Tube Cover	Remove
2.	AROW(+ supplements)	Check
3.	Parking Brake	Set if Not Chocked
5.	Control Wheel Lock	Remove
6.	Fuel Selector Valve	Both
7.	Alternate Static Source	Off
8.	Elevator Trim	Set for Takeoff
9.	Ignition Switch	Off
10.	Radio Master/PFD Switch	Off
11.	Master Switch (Battery Only)	On
12.	Fuel Quantity/Annunciators	Check
13.	Flaps	Extend
14.	Pitot Heat, Lights	On/Check/Off
15.	Master Switch	Off
16.	Baggage Door	Secure

Preflight Empennage

1.	Aspen OAT	Check for Blockage
2.	Tail Tie-Down	Disconnect
3.	Control Surfaces	Check Freedom and Security
4.	Trim Tab	Check Security
5.	Antennas	Check Security and Condition

Preflight Right Wing

1.	Aileron	Check
2.	Flap	Check
3.	Wing Tie Down	Disconnect
4.	Main Wheel Tire/Brake	Check
5.	Fuel Quantity	Check Visually
6.	Fuel Drain Valve (1)	Drain/Check
7.	Fuel Filler Cap	Secure

Preflight Nose

1.	Fuel Strainer Valve	Pull to Check Ensure Full Closure
2.	Engine Oil Dipstick	Check level and Secure
	*5 qt minimum	
	*Fill to 6+ for extended flights	
	*DO NOT OVERTIGHTEN	
3.	Engine Cooling Air Inlets	Clear
4.	Propeller & Spinner	Check
5.	Alternator Belt	Check
6.	Air Filter	Check
7.	Nose Wheel Strut and Tire	Check
8.	Static Source Opening	Check

Preflight Left Wing

1.	Pitot Tube + Drain Hole	Check for Blockage
2.	Fuel Tank Vent	Check for Blockage
3.	Stall Warning Opening	Check for Blockage
4.	Wing Tie Down	Disconnect
5.	Fuel Quantity	Check Visually
6.	Fuel Drain Valve(1)	Drain/Check
7.	Fuel Filler Cap	Secure
8.	Aileron	Check
9.	Flap	Check
10.	Main Wheel Tire/Brake	Check

Before Starting Engine

1.	Preflight Inspection	Complete
2.	Passenger Brief	Complete
	S- Seats/Seatbelts	
	A- Airvents	
	F- Fuel	
	E- Emergency	
	T- Traffic	
	Y- Your Questions	
3.	Seats/Seatbelts	Adjust and Lock
4.	Brakes	Test & Set
5.	Circuit Breakers	Check In
6.	Lights	Off Except Beacon

CAUTION
The radio master switch and PFD switch must be off during engine start to prevent possible damage to avionics.

7.	Radio Master, PFD Switch	OFF
8.	Fuel Selector Valve	Verify Both

Starting Engine

NOTE
If engine is warm omit priming procedure

PRIMING PROCEDURE

1.	1-3 Pumps	IF NEEDED
2.	Primer	In and Locked

STARTING ENGINE

1.	Mixture Control	Full Rich
2.	Carb Heat	Cold
3.	Throttle	Pump x2
4.	Throttle	Open 1/8 Inch
5.	Propeller Area	Clear
6.	Master Switch (Battery Only)	On
7.	Flashing Beacon	On
8.	Ignition Switch	Start
9.	Oil Pressure	Check
10.	Throttle	1000 RPM
11.	Mixture	Lean for Max RPM
12.	Throttle	800-1000 RPM
13.	Master Switch (ALT)	On
13.	Nav Lights	OFF Except for Night
14.	Radio Master/Radios	On
15.	PFD Switch	On
16.	EDM 830 Display	"REFUEL?"Y/N
	See EDM830 Cheat Sheet for more	
17.	Flaps	Retract
18.	Flap handle	Neutral

Before Taxi

1.	Heat / Vents / Defrost	As Needed
2.	Radios/Navaids/GPS	Checked / Set
3.	ATIS	Set BARO/ALT/HDG Bug
4.	Transponder	Verify ALT/SQK
		No Annunciations

Taxi

1.	Brakes	Release and Test
2.	Throttle	Adjust for Min Brake Use
3.	Check Flight Instruments	
	• ASPEN PFD/STBY	

NOTE:
This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft. The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs

Before Takeoff - Run-Up

1.	Parking Brake	Set
2.	Seats	Secure
3.	Seat Backs	Most Upright Position
4.	Seat Belts	Secure
5.	Cabin Doors	Closed and Locked
6.	Flight Controls	Free & Correct
7.	Flight Instruments	Check & Set
8.	Fuel Quantity	Check
9.	**Mixture**	**Full Rich**
10.	Carb Heat	Cold
11.	Fuel Selector Valve	Both
12.	Throttle	1700 RPM
	1. Mixture:	**Lean for Max RPM**
	2. Mag Check (125/50 max)	
	3. Carb Heat	Check RPM Drop CRB Temp Increase
	4. Engine Instruments	Check
	5. Amps/Volts	Check
13.	Annunciators	Check
14.	Throttle	Check Idle
15.	Throttle	800-1000 RPM
16.	Mixture	Lean as Needed
17.	Throttle Friction Lock	Adjust
18.	GPS CDI	Select Nav Source
19.	ASPEN CDI	Select Nav Source
20.	EDM830 Switch	Select EGT
21.	Elevator Trim	Set for Takeoff
22.	Transponder	Verify ALT/SQK No Annunciations
23.	Land/Taxi/Bcn/Strobe Nav Lights Night Only	On
25.	Carb Heat	Cold
26.	Parking Brake	Release

Before Takeoff- Hold Short Line

1.	Frequency	TWR/CTAF
2.	Flaps	Set for Takeoff (0°-10°)
3.	Takeoff	Brief

Runway/Takeoff Type/Speeds/Heading/Altitude
Lose engine on runway IDLE, EXIT RWY
Lose engine airborne rwy remaining LAND
Lose engine below 1000 AGL PUSH 70KTS
Land Straight +/-30°
Above 1000 AGL PUSH 70KTS
Consider return to airport

4.	Mixture	Best Power

All speeds in KIAS

Normal Takeoff

1.	Flaps	0°-10°
2.	Throttle	Full Open
3.	Vr	53 KIAS
4.	Vy	73 KIAS

SHORT FIELD

1.	FLAPS	10°
2.	Use all Available Runway	
3.	Hold Brakes/Full Power/Check RPM	
4.	Release Brakes	
5.	Vr	53 KIAS
6.	Vx	58 KIAS
7.	Obstacle Cleared	73 KIAS/Flaps UP

SOFT FIELD

1.	FLAPS	10°
2.	Full Aft/No Brakes	
3.	Remain in Ground Effect	
4.	Begin Climb	Vx 58 KIAS
5.	Obstacle Cleared	73 KIAS/Flaps UP

Enroute Climb

1.	Airspeed	80 - 90 KIAS
2.	Throttle	Full Open
3.	Carb Heat	Cold
4.	Mixture	Full Rich below 3000’
5.	Engine Instruments/**CHT**	Check
6.	Transponder	Verify ALT/SQK

Cruise

1.	Power	As Needed
2.	Carb Heat	As Needed
3.	Elevator Trim	Adjust
4.	Mixture	Lean as Needed
5.	Lights	As Needed
6.	EDM830 Switch	As Needed

Before Descent

1.	Weather (ATIS)	Obtain
2.	Altimeters	Set
3.	Approach	Brief
4.	VOR/GPS Setup	As Needed
5.	ASPEN and GPS CDI	Select
6.	Fuel Selector Valve	Both
7.	Mixture	Adjust
8.	Carb Heat	As Needed

Before Landing

1.	Seat Backs	Most Upright Position
2.	Seats & Seat Belts	Secure & Lock
3.	Fuel Selector Valve	Both
4.	Mixture Control	Richen
5.	Carb Heat (apply full heat prior to idle)	As Needed
6.	Landing & Taxi Lights	On

Normal Landing

1.	Airspeed	65 - 75 KIAS
2.	Flaps	As Needed Below 85 KIAS

SHORT FIELD

1.	Flaps 30°	
2.	Airspeed	61 KIAS
3.	Aerodynamic Braking	Flaps UP Yoke Aft Apply Brakes

SOFT FIELD

1.	Flaps 20° -30°	
2.	Hold Nosewheel Off	
3.	MINIMUM to NO Braking	

Balked Landing

1.	Throttle	Full Open
2.	Carb Heat	Cold
3.	Wing Flaps	Retract to 20°
4.	Climb Speed	65 KIAS
5.	Flaps	Retract Slowly

After Landing (Clear of Runway)

1.	Carb Heat	Cold
2.	Aircraft	Clear of Runway Full Stop
3.	Throttle	1000 RPM
4.	**Mixture**	**Lean for Maximum RPM**
5.	Throttle	Adjust for Min Brake Use
6.	Wing Flaps	Up
7.	Lights	As Needed
8.	Transponder	ALT/1200
9.	Pitot Heat	Off
10.	Taxi Clearance	Brief

Securing Aircraft

1.	Parking Brake	As Needed
2.	Electric Equipment	Off
3.	PFD Switch	Off
4.	Radio Master Switch	Off
5.	Throttle	Idle
6.	Magnetos	Check for Ground
7.	Mixture	Idle Cut Off
8.	Magnetos	Off, Remove Key
9.	Master Switch	Off
10.	Control Wheel Lock	Install
11.	Parking Brake	Off when Chocked
12.	Fuel Selector	Left or Right
13.	Sun Shields	Install
14.	Aircraft	Locked if away from Home
15.	Flight Plan	Closed

V Speeds and Specs

☐	X-Wind (Max Demo’d)	15 Knots
☐	Best Glide Speed	68 KIAS (flaps up)
☐	Short Field Takeoff	flaps10° 58KIAS
☐	Vx (Sea Level)	62 KIAS
☐	Vy (Sea Level)	73 KIAS
☐	Vso Stall w/ Flaps	49 KIAS
☐	Vs1 Stall w/o Flaps	56 KIAS
☐	Va (2550#)	105 KIAS
☐	Va (2150#)	95 KIAS
☐	Va (1750#)	85 KIAS
☐	Vno Max Structural Cruise	126 KIAS
☐	Vne Never Exceed	158 KIAS

Aircraft Information

☐	Gross Takeoff Weight	2550 lbs
☐	Engine	Lycoming O-360-A4M
☐	Max Power	180 BHP
☐	Max Engine Speed	2700 RPM
☐	Fuel Type	100LL (Blue)
☐	Fuel Capacity	38 Gal Usable
☐	Oil Capacity	8 Qts (Minimum 5)
☐	Electrical	14 Volt
☐	Tire Pressure	Nose-45/ Main-38 PSI
☐	BEW	1488.57
☐	Arm	38.65
☐	Moment	57526.97