

Greetings!

I developed this checklist for use with my 1978 Mooney 201. It is specific for my particular airplane, N222BH, since it includes references to optional equipment installed on this airplane. You are welcome to use all or part of it as you see fit.

It began life as the checklist out of my POH and went through several iterations before ending up in its present form. Briefly, it was modified as follows:

1. Items not on the POH checklist were added (like speed brakes) .
2. I changed the flow of each section of the checklist so that you don't jump from place to place around the cockpit while completing any section of the checklist.
3. After flying with it for a few weeks and making notes (and mistakes!), I deleted some items, added some, duplicated some key ones and re-ordered a couple of others. Nothing like starting the takeoff roll with the speed brakes deployed to decide to add it to the final pre-takeoff check!

I mount the checklists with spray adhesive onto cardboard. Usually it is the cardboard from the back of a paper tablet like a legal pad (I'm cheap!). The first two pages go back to back, the second and third go back to back, and so on. I also sized it 5.5" by 8.5" so it only needs to be cut one way. This is also the size of my POH. I always hated flipping pages on checklists and mounting them on cardboard eliminates that. Now they just slip into a pocket on the pilot side wall.

Because of how I designed the checklist, I am only using one of the three of these cardboard checklists at a time. The others are usually in a pocket or on the glare shield out of the way.

I look at the preflight and put it away when I am done, the other side won't be needed until cruise. Another of them (pgs 1 & 2 below) takes me from start to the runup and final pre-takeoff check. Then that gets put away, I'm done with it until next time. The third one (pgs 3 & 4 below) takes me from takeoff through cruise and descent, landing, shut down and parking. It also has speeds and an emergency section. This is the one I have close by during flight. The one that has the pre flight check information also has sample cruise power settings (My airplane doesn't have them on the sun visor). If I am in the mood I can always pull out the POH and fine tune them, but these work most of the time.

A comment about the preflight checklist. I was taught, like many of us, to do the preflight without carrying a checklist. Therefore the 'preflight' portion of the checklist is designed in a reminder format, not as a task list. I do the preflight without it and then review the list to see if I forgot anything. That is why it is organized by section of the airplane, not like the one in the POH, which is designed to be used as a task list while doing the preflight.

I am open to any comments, criticisms and suggestions that you have about the checklist.

Joel Ludwigson
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BEFORE STARTING ENGINE**N222BH**

Preflight	COMPLETE
Baggage door	LATCHED/LOCKED
Door	LATCHED/LOCKED
Seatbelts	FASTENED
Passenger brief	[seatbelts/exits/smoking/talking/traffic]
Circuit breakers	IN
Transponder	1200
Landing gear switch.....	DOWN position
Clock	SET
Radio master	OFF
Alternate Static	OFF
Propeller	HIGH
Ram air door.....	CLOSED
Parking brake	SET
Cowl Flaps	OPEN
Fuel selector	LOWEST tank
Fuel drain	middle drain, 1 count each
Controls	FREE & CORRECT

STARTING ENGINE WHEN COLD

Mixture	FULL RICH
Throttle	1/4 <u>throttle</u>
Master switch	ON
Anti-collision	ON
Boost pump	Count 6, then OFF
Mixture	IDLE CUT OFF
Propeller area	CLEAR
Starter	engage
Throttle	1000 RPM

STARTING ENGINE WHEN WARM

Parking brake	SET
Mixture	IDLE CUT OFF
Throttle	1/4 <u>throttle</u>
Master switch	ON
Anti-collision	ON
Propeller area	CLEAR
Starter	engage
Mixture	advance
Throttle	1000 RPM

STARTING ENGINE WHEN FLOODED

Parking brake	SET
Mixture	IDLE CUT OFF
Throttle	open FULL
Boost pump	OFF
Master switch	ON
Anti-collision	ON
Propeller area	CLEAR
Starter	engage
Mixture	advance
Throttle	retard to 1000

TAKE-OFF, NORMAL

N222BH

Accelerate to 62 to 70 kts
Airspeed (Vy), 90 kts
Landing gear up before 109 kts
Power/RPM @ 500 ft 26"/2600 RPM

TAKE-OFF, SHORT FIELD/SOFT FIELD

SHORT FIELD/OBSTACLE

SOFT FIELD

Accelerate to.....	62 kts	Roll onto runway without stopping
Climb at	66 kts (Vx)	Yoke Full back
Gear	override UP	Accelerate to 90 kts in ground effect
Once clear accelerate to 90 kts (Vy)		Gear UP
Flaps	Retract slowly once climb established	Flaps Retract slowly once climb established

CRUISE

Boost pump OFF
Flaps UP
Cowl Flaps CLOSED
Normal max. power 75%
Best POWER lean to: 50° C RICH of PEAK
Best ECONOMY lean to: PEAK (or LOP)

DESCENT

Ram air door..... CLOSED
Mixture ENRICHEN
Fuel selector FULLEST tank

APPROACH AND LANDING

Landing light as required
Landing Gear DOWN, 133 kts max
Mixture SET
Propeller HIGH
Seat belts/harness FASTENED
Seat backs ERECT
Power 15"/12"
Airspeed Final 65 - 70 kts
Flaps 115 kts max,
Final Check Gear down/Prop high

AFTER LANDING

Pitot Heat OFF
Flaps UP
Cowl Flaps OPEN
Speedbrakes RETRACT

STOPPING ENGINE

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Transponder 1200
Flaps retract FULLY
Trim SET for takeoff
Speedbrakes RETRACT
Lights OFF
Electric Trim OFF
Radio Master OFF
Throttle 1200 RPM
Propeller HIGH
Mixture IDLE CUT OFF
Master OFF
Magnetos OFF

PARKING

Overhead Air Scoop CLOSED
Control wheel If tied outside then SECURE with seatbelt
Door/luggage door LOCKED
Tie downs SECURE
Flightplan CLOSED?

ENGINE POWER LOSS IN FLIGHT

Airspeed best glide, 91 kts
Mixture full RICH
Boost pump ON
Fuel selector tank WITH FUEL
Propeller LOW PITCH
Cowl Flaps CLOSED

FIRE IN FLIGHT

Source? Electrical (smoke in cabin), or Engine

ELECTRICAL

Master switch OFF
Vents OPEN
Storm window OPEN
Heat/defrost OFF

ENGINE

Mixture IDLE CUT OFF
Boost pump OFF
Throttle CLOSED
Fuel selector OFF
Heat/defrost OFF

SPEEDS

Vy (gear up) 90 kts
Va 120 kts
Vfe 115 kts
Glide (gear up) 91 kts
Vx (gear up) 71 kts
Vlo 135 kts
Vle 133 kts
Gear up by 109 kts

Preflight Inspection

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Cockpit/Cabin

Landing gear switch DOWN position
Radio Master OFF
Master switch ON
Landing gear light "Gear Down"
Annunciator lights press to test
Gyro listen, spooling?
Fuel gauges check, note quantity
Master switch OFF
Magnetos OFF
Controls FREE and CORRECT
Cabin Clean?

Outside

Airframe ALL ice and snow removed
Wings damage?, check flap and
aileron hinges for security,
wingtips for damage, pitot
drain clear, stall warn vane free,
all tiedowns removed.
Landing gear Check tire condition/pressure,
check for hydraulic leaks,
check wheel wells, clean?
wheel chocks removed?
Fuel drains 1 each wing
Fuel quantity adequate? agree with gauges?
Windshield secure? clean?
Fuselage damage? antennas secure?
static drain free of moisture?
Empennage damage? hinges secure?,
stabilizer free? rudder secure?
tiedown removed?
Nose cowl secure? oil (6+ qts),
alternator belt tight? air intakes clear?
Propeller nicks, leaks, twist, spinner secure?

Electrical

Master ON
Nav lights ON
Anti-collision ON
Landing light ON
Pitot heat ON

Walk around the airplane and verify that all lights are lit and the pitot heat works.
Check the operation of the stall warning horn.

**TURN OFF THE MASTER AND ALL ABOVE EQUIPMENT BEFORE
PROCEEDING**

Power Setting Table - Lycoming Model IO-360-A3B6D, 200 HP

Pressure Altitude (feet)	Std Temp. °F/°C	110 HP - 55% RPM & Man Press		130 HP - 65% RPM & Man Press		150 HP- 75% RPM & Man Press		Pressure Altitude (feet)
SL	59/15	21.0 -2400	22.5 -2200	21.8 -2600	24.0 -2400	24.7 -2600	25.9 -2500	SL
1000	55/13	20.7 -2400	22.3 -2200	21.7 -2600	23.8 -2400	24.6 -2600	25.8- 2500	1000
2000	52/11	20.4 -2400	22.2 -2200	21.6 -2600	23.6 -2400	24.4 -2600	25.6 -2500	2000
3000	48/9	20.3 -2400	22.1 -2200	21.5 -2600	23.4 -2400	24.4 -2600	25.5 -2500	3000
4000	45/7	20.2 -2400	22.0 -2200	21.5 -2600	23.3 -2400	24.4 -2600	25.4 -2500	4000
5000	41/5	20.1 -2400	21.9 -2200	21.4 -2600	23.0 -2400	24.2 -2600	25.3 -2500	5000
6000	38/3	20.0 -2400	21.8 -2200	21.3 -2600	22.8 -2400	24.1 -2600		6000
7000	34/1	19.9 -2400	21.9 -2200	21.3 -2600	23.0 -2400	23.8 -2600		7000
8000	31/-1	19.8 -2400	22.0 -2200	21.2 -2600	23.1 -2400	23.6 -2700		8000
9000	27/-3	18.4 -2600	19.7 -2400	21.2 -2600				9000
10,000	23/-5	18.3 -2600	19.5 -2400	21.1 -2600				10,000
11,000	19/-7	18.3 -2600	19.4 -2400	20.0 -2700				11,000
12,000	16/-9	18.2 -2600	19.3 -2400	19.8 -2700				12,000
13,000	12/-11	18.0 -2600	19.3 -2400					13,000
14,000	9/-13	17.8 -2600	19.2 -2400					14,000

Fuel Consumption Approximations

75% Best Power	11.5 GPH	65% Best Power	10.5 GPH
75% Best Economy	10.0 GPH	65% Best Economy	9.5 GPH

Best power = 50° C rich of peak EGT Best Economy = Peak EGT (or LOP)

To maintain constant power, correct manifold pressure approximately 0.15" Hg for each 10° variation in temperature from standard altitude temperature. **ADD manifold pressure for air temperatures above standard; SUBTRACT manifold pressure for temperatures below standard.**