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Mooney M20C N6667U (1963 SN #2394)

General

- Mooney puts the panel closer to you which makes the plane feel small
 - Mooney is just as wide, ceiling may be shorter, but it isn't really 'tight'
 - Sports car. Not a big open C172 sitting on a chair, but not sitting on floor like a C152
- Controls are sensitive and much lower total range of motion
 - Pushrod system, no slack. Yoke range is 1/3rd a Cessna so it is very sensitive, less total throw
- Issues:
 - The weather stripping makes flapping noise.
 - Left main tank fuel gauge bounces. But the bottom of the bounce is correct
 - Hatch latch removed. Hold cargo door with hand at all times.
- 3 POH's on www.mattbeyer.com
 - Ranger, Mark, and a copy of the POH from the plane. Use all 3

Systems

Weight and Balance

- Need to review with student. I have created a template and put it in the POH in the airplane. Use it.

Brakes

- There are no brakes on the right side

Lighting

- The rotating beacon on the belly is controlled by the 'strokes' switch.

Tach reads 100 low. Flying at 2500 (2400 on the gauge works great)

- !!Stay out of the red on the tach. This area has an engine/prop vibration that can cause damage and maybe not felt by the pilot. Only transition through the red, don't stay there.

Outside Step (crank on pilot side sidewall, inside), just leave the step retracted. Don't crank it up or down.

Propellor control does walk back to high RPM, need to include in scan.

Ventilation/Heat

Close the overhead air vent after parking so rain water doesn't get in overhead. Under the dash on each side (above your feet), adjustable vent.



Flaps

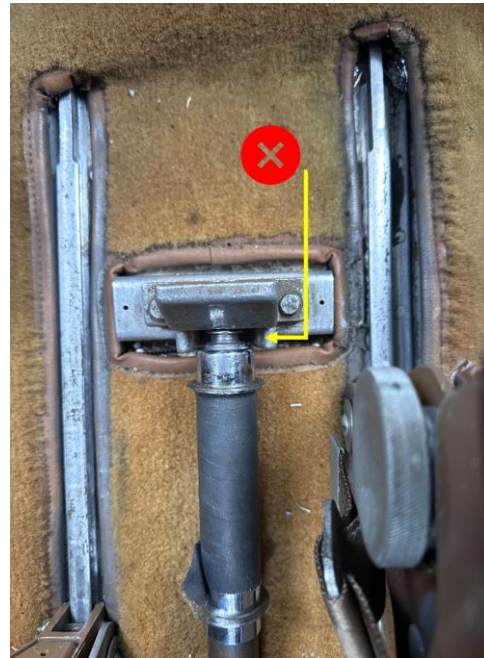
- Ensure in the white arc, plane is fast and easy to be out of white
- Retract flaps soon after takeoff before out of the white
- Can pull the release and stow the handle, then close the release
- Pump them to extend, incrementally
- Pull to let the hydraulic out and let it release. Wind will help them retract.
- MAKE sure the flap release is IN when adding flaps, or its not going to do anything.
- Flaps retracted to flaps full is ~4.5 full pumps. Manage it through base/final to get to full flaps.

Tiedown

- The tail hook is too small, feed the hook through a link and connect to the tail hook

Landing Gear

- Must be 120 mph indicated or less for extend/retract the gear.
- Keep the gear lever swing area clear so it can be operated.
 - Example, passenger seatbelt can get in the way, buckle it when solo
- Gear retract and extend speeds will make it hard or easy for gear operation. 85mph gear up is good
- https://www.youtube.com/watch?v=Vz1_CM7YdAU
- Gear lever must be latched down and latched up.
 - Latching up (gear extend) is critical it is in, slide up, latched/locked.
 - The green light is not enough to ensure locked.
 - Yank down on it a couple times to ensure
- **Retracting (Gear Up):** The gear handle must be **Fully** seated in the holder on the floor. Otherwise it may “pop out” during flight.



- **Extending (Gear Down):** The gear handle must be Fully seated in the holder, and locked, and green indicator



Operations (special considerations, follow checklist)

Starting:

- Follow my checklist for summer and winter

Fuel System

- Fuel selector: You have to pass through 'OFF'. Yikes, be careful.
 - I always have new renters figure out what works for them on the ground, how to get their hand on the control (through the legs or around or...) and also ensure 1 single motion when changing tanks. Try not to stop on the 'off' position while changing, hustle.
- Fuel gauges are in pounds and unreliable. Use the calibrated dipstick in the back
- 24/24 for 48 usable gallons
- Fuel pump on for tank changes (as usual for a low wing)
- There are 3 fuel sumps, one under each wing (hard to find) and a 3rd way up under the nose gear wheel well.
 - I skip the 3rd one because it requires you to lay in the oil on the ground.
 - Here is the 3rd sump that you cannot get to. Skip



- The fuel caps are threaded to control the force on the rubber stopper.
 - If the cap is too loose, tighten it. If the cap is too tight and you cannot lock it, loosen it.

Takeoff

- Make sure flaps set and trim set to the "Take Off" window. Line up the lines.
- and pump on. Follow checklist

Landing

- Rubber pucks on landing gear, especially on the nose gear, make for bouncy.
 - Taxi can be very bouncy
 - Don't bounce on landings
- Do not bounce or porpoise

She will fly up to the yellow no problem

- Be mindful things are fast, slow for procedures and early on approach etc