High Performance Endorsement & Aircraft Checkout

Cessna Skylane 182 & Maule M7

If pilot has more than 25 hours in high performance airplane in last 2 years

- ☑ Checkout in our aircraft covering required maneuvers and emergencies
- ☑ Fly to test standards for their certificate level
- ☑ Aircraft review sheet plus high-performance addendum completed, reviewed and signed by CFI

If pilot has less than 25 hours high performance time but already has a high performance endorsement:

- ☑ Minimum of 3 hours in the Make/Model (5 hours in the Maule) for checkout, including 15 takeoffs and landings
- ☑ Checkout in our aircraft covering required maneuvers and emergencies
- ☑ Fly to test standard for their certificate level
- ☑ Aircraft review sheet & high performance addendum completed, reviewed and signed by CFI

If pilot has no high performance endorsement:

- ☑ Minimum of 5 hours in the Make/Model for checkout, including 25 takeoffs and landings
- ☑ Checkout in our aircraft covering required maneuvers and emergencies
- ☑ Aircraft review sheet & high performance addendum completed, reviewed and signed by CFI
- ☑ High performance endorsement

* A minimum of 50 hours tailwheel time is required for solo rental of the Maule.

Checkout must include the following:

<u>Ground</u>:

- Aircraft manual review: normal, abnormal and emergency checklists, systems, weight & balance, performance, fuel burn, and limitations
- Dispatch procedures, airworthiness, preflight inspection, fueling and servicing.
- Crosswind, gusty wind, short-field and/or soft-field: adjusting airspeed and flap settings for takeoff and landing in various conditions.
- Important differences for high performance and specifically C182 operations during each phase of flight: preflight, starting, taxi, runup, takeoff, climb, engine management, cruise power settings (fuel range and reserve considerations), descent planning, approach and landing.
- Hot and cold weather operational considerations.

Flight:

- ❒ Normal/crosswind takeoff & climb
- ❒ Transition to enroute climb and when to use a step climb
- ❒ Maneuvering flight including steep turns
- ❒ Slow flight in clean and landing configurations, emphasis on elevator pressure needed and its effectiveness at lower (approach) speeds
    - o Turning tendencies at different speeds and AOA
- ❒ Climbs at V_Y, then V_X to learn different climbing pitch attitudes, followed by a pitch increase of 3-5° until stall occurs (the point being that any pitch steeper than V_X will result in a stall; as drag overcomes lift and relative wind drops, AOA increases to critical point – watch VSI to "see" this)
- ❒ Power-off stalls (i.e. learning landings) with each flap setting until student is comfortable holding the nose-high attitude needed for landing with each stage of flap
- ❒ Stall recognition & recovery
    - o Review stall recovery & go-around procedures are in proper order:
        1. Throttle and carb heat full forward
        2. Pitch near horizon (or as appropriate to arrest descent/climb)
        3. Rudder applied and maintaining runway centerline
        4. Retract flaps in 10° (or 1 notch) increments with eyes outside
        5. Climb at V_Y or enroute climb speed
        6. Recover to cruise at a safe altitude
        7. Run checklist when able
- ❒ Climb, cruise climb, cruise, descents, glides and power setting changes.
    - o Entering a climb: Cowl flaps, mixture, prop, throttle.
    - o Cruise/descent: Throttle, prop, cowl flaps, mixture.
- ❒ Engine leaning, cooling considerations
- ❒ Normal/crosswind approach & landing
- ❒ No flap and partial flap takeoffs
- ❒ No flap and partial flap approaches & landings
- ❒ Soft-field approach & landing
- ❒ Sideslip and forward slips
- ❒ Simulated engine failure with power-off landings
- ❒ Emergencies/malfunctions including how to identify and deal with alternator malfunctions, engine fire and/or failure.
- ❒ Short-field approach & landing only if training for commercial or if , no hard braking, no spot landings, work slowly down to short-field speeds and full flap landings.

Paperwork must be filled in and turned in to office, aircraft checkout sheet checked and signed off, and high-performance endorsement in logbook.