- 1. No Solo touch-n-go's allowed. Touch-N-Go's only allowed with a cfi onboard. Solo cross-country endorsements for student pilots are only valid for the time period of the planned flight.
- From the flight school rules manual... STUDENT SOLO LOCAL
 1)Traffic pattern: 2000' ceiling & 8 statute miles visibility.
 2)Practice area: 3000' ceiling & 10 statute mile visibility.
 3)Maximum wind not to exceed 20 knots. Crosswind component not to exceed10 knots.

STUDENT SOLO CROSS-COUNTRY 1)3000' ceiling & 10 statute miles visibility. 2)Maximum wind not to exceed 20 knots. Crosswind component not to exceed10 knots.

- There's been some lax student pilot limitations on endorsements lately: Here's what I have used for 15 yrs. >=2000ft ceiling, >=P6SM visibility, <=8kt crosswind, Less than 15kt max gust. Some seasoned instructors also put in addition to the above, 'Must get instructor approval prior to each flight'.
- 4. New student form and scheduler request should be done before the customer leaves after the first flight. I normally do mine before we do anything except greetings. I fill out both forms myself instead of having the customer do it so it's done right.
- 5. Cold weather reminders: When filling the planes, leave 1 or two inches from the top or else they will leak all over the hangar floors when they warm up causing a fire risk.
- 6. Don't leave the hangar door when it is going up and down. You are the limit switch always. The tan hangar door was sent up, person operating walked away and the limit switch didn't stop the door. \$7000 and 3 weeks to wait for parts. Same has happened with the other two hangar doors.
- 7. Anytime something doesn't work, squawk it on the Hobbs sheet AND tell Mike or Ken. If something doesn't get fixed in a reasonable amount of time, send Randy a note. "Just wanted you to know XXX hasn't been fixed for a while. Not sure if you knew"
- 8. The Alpha hangar door is extremely tricky. Do not operate it unless Ken or Mike has trained you on it.
- 9. 150 cold weather ops: Here's how I handle the 150's. Taxi with carb heat full ON. Do run up and take off with carb heat a thumbnail out. During takeoff, make sure to push the throttle in as you count to three. If engine stumbles after full power abort the takeoff. Once in cruise, I play with the carb heat till I find the area that it runs best at. C182's are similar but they have a carb temp gauge to help out with how to set the carb heat. Beech 18's are even worse with carb (MP) heat.

- 10. There are many visual actual avionics instrument cutouts and a gyroscopic precession tool to help your students understand concepts.
- 11. MN State licensing requirements:
 - i) Flight School: must have an office, maintain records, provide a course curriculum for each course offered, submit a copy of the rules governing the flight school operation, carry the appropriate insurance coverage, and submit a performance bond. Flight schools are required to carry a minimum insurance coverage of \$100,000 per person and \$500,000 per occurrence for bodily injury and property damage for each aircraft. Students must also be provided a disclosure statement that advises them whether or not they are covered by the commercial operator's insurance coverage and the amounts of any coverage. A copy of the disclosure form must be submitted with initial applications and at each renewal.
 - ii) MN State Statute 8800.3300 subpart 5: Subp. 5. Curriculum. The flight school must show a course outline so organized for each course offered as to ensure that the student completing the course of ground and flight instruction will meet all the requirements of the FAA. All course outlines must include a review of Minnesota Statutes and rules relating to aeronautics that are pertinent to that course. In the case of an FAA-approved school, the FAA-approved course outline is acceptable if the review of Minnesota Statutes and rules is included. The flight instruction given to each regularly enrolled student must be in accordance with the course outline. A copy of the course outline must be made available to each student
- 12. According to FAA Advisory Circular 20-113, "to prevent accidents due to induction system icing, the pilot should regularly use [carburetor] heat under conditions known to be conducive to atmospheric icing and be alert at all times for indications of icing in the fuel system."
- 13. From the FAASTeam 'Rules of Thumb' Dec 8 2022

Rules of Thumb

Takeoff Distance

Fixed pitch prop, add 15% to your calculated takeoff distance for each 1,000-foot increase in density altitude up to 8,000 feet/12% per 1,000 feet up to 6,000 feet for constant speed prop.
 When planning takeoff from short, unobstructed runways, establish a landmark at 50% of your calculated takeoff distance.

When on the takeoff roll, you should have 70% of your rotation speed at that point. If you don't, the safest thing to do is to abort the takeoff.

¹ If you can't meet the above requirement, reduce weight or wait for more favorable wind and temperature conditions.

 \leq If you must clear obstructions on takeoff, you'll need to have 70% of your rotation speed by the time you've traveled 30% of your available takeoff distance.

Approach and Landing

You'll want to be stabilized on final approach with full flaps at 1.3 times the stalling speed in landing configuration. Don't cut your final short. Make it long enough to be stable and go around if you're unstable.

- a. <u>https://medium.com/faa/aircraft-performance-and-calculations-</u> <u>b24a10fe2401</u>
- 14. Nine mistakes all students make
 - a. <u>https://www.boldmethod.com/blog/lists/2023/01/9-common-mistakes-every-student-pilot-makes/</u>
- 15. IFR: 23D, 52S, Arrow and Baron have WAAS capable GPS's. The others are non-WAAS. Only WAAS GPS's have a glideslope when conducting GPS approaches.
- 16. The AV30's won't work right in GPS track unless you have a waypoint loaded.
- 17. When teaching or doing a Flight Review in a student's plane, Mx logbooks have to be blessed by an Air Trek North mechanic prior to the first flight. It will also need approval from the Chief Flight Instructor.
- 18. For Comm SE: The 10hr solo aeronautical experience under 61.129(a)(4) MUST be solo, or if an instructor is along CANNOT be marked as dual. If an instructor is along, the instructor CANNOT give any training or advice while along (simulated SOLO often called PDPIC time). In addition, if you decide to try to use an instruction ride along to satisfy the 10hr SOLO time, you should verify with the DPE prior to the check ride to prevent an issue. See below for further guidance on the commercial experience reqts.
 - a. Can I combine the day and night dual cross-country requirements with the requirement for the 300 nautical mile cross country?
 No. The cross country flights are required training and the 300 nautical mile cross-country must be conducted as a solo operation or while performing the duties of pilot-in-command (sometimes called PDPIC time).
 - b. I did a long cross-country flight to meet commercial certificate aeronautical experience requirements, but a non-pilot was on board. Since they aren't a pilot, I can log that flight as solo, right?
 No. 14 CFR <u>61.51</u> defines solo (except for airships requiring 2

crew members) as when **you are the solo occupant of the aircraft**. Do not confuse "sole manipulator of the controls" with "sole occupant."

c. When can I log PDPIC time?

PDPIC (performing the duties of pilot and command) time can be used in lieu of the solo aeronautical experience requirements for the commercial certificate, <u>14 CFR 61.129(a)(4)</u>.

To log PDPIC time in an aircraft for which you do not hold a certificate for category, class, and type (if a type rating is required), you first receive the required training from an authorized instructor who then determines that you are ready to perform the duties of pilot in command.

When you perform the duties of pilot-in-command, your instructor is on board the aircraft, you are not the sole occupant, so do not log solo time. You log the time as pilot-in-command, not dual instruction. Your instructor also logs the time as PIC.

- d. Can I combine PDPIC and solo time to meet the commercial certificate requirements?
 No, <u>14 CFR 61.129(a)(4)</u> specifies PDPIC or solo. When different types of pilot time may be combined, the regulations will include the phrase "or any combination thereof."
- e. *Does PDPIC time count toward to total PIC time?* It depends.

You may log both PDPIC time and PIC time when you hold a certificate for category, class, and type (if a type rating is required) for the aircraft flown.

If you are applying for an initial commercial pilot AMEL certificate and you do not already hold a multiengine rating, you may not log time in a multiengine aircraft as PIC. In this case, PDPIC time may only be used to meet the aeronautical experience requirements for a commercial certificate and a recommended practice is to log that time in a separate column in your logbook.

- 19. Sexual contact with customers will not be tolerated and will end up with an immediate 90 day suspension and possible termination.
- 20. Our online credit card system (Discovery flights and deposits for accelerated programs) do not talk to each other. A new student renter form needs to be done if a discovery customer decides to start training and all accelerated students should have a student renter form filled out prior to any training.

Traffic Pattern Code of Conduct used by Air Trek North and Cadot Flight Training at KSGS.

