

## **Blue Skies Flight Training LLC Private Pilot Syllabus Flying Portion**

- Generally, Blue Skies Flight Training LLC. [BSFT] uses the ASA Private pilot flight and ground training syllabus. However the flight portion of such a syllabus or any other syllabus a student wants to use, should be revised for the flight portion only to follow this flight portion only Syllabus.
- The order of this flight Syllabus is critical and if the initial tasks at very least, cannot be completed successfully, other subsequent tasks shall not be attempted.
- All safety procedures contained within the [BSFT] safety procedures handout, are in effect and shall be complied with while conducting this private pilot flight training syllabus.
- The number of the flight lessons estimated in this syllabus may need to be adjusted to account for each student learning at his or her own pace and the need for repeating tasks to match proficiency and FAR legal time requirements.
- All of these flights should allow for ground instruction time prior to the flight to discuss the maneuvers that will be accomplished for the flight and some post brief time to discuss those maneuvers flown.

**Discovery Flight:** Under no circumstances shall first time pilots taxi, takeoff, maneuver within 1000 feet of the ground, or land an aircraft during the discovery flight. **After** the aircraft has reached 3000 feet MSL or higher, the Instructor may then transfer control to the student, in a trimmed for level flight condition, to teach Straight & level flight [S&L] and trim. Maybe, level turns to a heading and climbs/ descents may be accomplished otherwise, primarily what the discovery flight is going to include is Straight & Level [S&L,] climbs, descents, turns to a heading and or timed turns. At the discretion of the instructor, students may use some time to fly over their house or around the city. However, discovery flights solely for the purpose of sightseeing, are prohibited

by BSFT and by FAR. Discovery flights should generally not exceed 1.0 on the Hobbs. Subsequently, flights will generally be from 1.0 to 1.5 hours Hobbs.

**Flights 2-7:** Under no circumstances shall a student takeoff an aircraft unless that student has mastered and is proficient at taxiing, trimmed out S&L, climbs/ descents, and slow flight. Landings may not be accomplished by the students unless the student has mastered and is proficient at everything in these lessons and the next section lessons including S&L, slow flight, stalls, steep turns, simulated engine failure, emergency descents and ground reference maneuvers. However, prior to completion of these tasks the students may be encouraged to be on the flight controls with the instructor accomplishing the landing.

1. Trimmed out S&L flight is a task which many instructors unfortunately gloss over before moving on to all other tasks and fail to revisit it enough. If the student can consistently maintain S&L for five minutes or more, with tolerances of plus/ minus five degrees in heading and plus/ minus 50 feet in altitude, then the next tasks may be attempted. Feel free to recheck trimmed S&L within those parameters in subsequent flights with different wind conditions to make sure proficiency is maintained.
2. After S&L is mastered, shallow to medium banked turns may be accomplished visually using roads and landmarks, via directional gyro turns to a heading and timed turns.
3. Climbs/ descents may then be added and should be accomplished via airspeed and vertical speed type climbs/descents. Then a combo of turning climbs/ descents should be practiced. A light grip on the yoke should continuously be emphasized throughout these lessons. After the students are proficient and comfortable with 1-3 you may then move on to slow flight.
4. Slow flight is one of THE most important maneuvers in the private pilot program and one of the most overlooked or glossed over maneuvers by flight instructors. Slow flight should be practiced in the dirty then clean configurations followed by in banking conditions. Emphasis to the student that the ACS calls for not hearing the stall warning horn during slow flight for the checkride however; BSFT Instructors shall initially instruct slow flight in the company 172's only [other aircraft with prior consent] at the minimum controllable airspeed i.e. at the onset of the stall warning horn. Once THIS configuration may be consistently

maintained, in different directions, 100 feet plus/minus altitude, 10 degrees bank, the next tasks may be attempted. 5. Power off stalls in the landing configuration should be next followed by power on stalls in the takeoff [clean] configuration. Next task should not be moved on to unless not only ACS standards have been met but the student completes stalls with confidence and comfort. Do not forget to accomplish at very least, power off stalls in banked configurations [no more than 20 degrees bank] any time hereafter and prior to them taking the checkride or, prior to moving to the next tasks at the discretion of the instructor. 6. Steep turns should be next on the list. Steep turns should be started at cardinal headings and even thousands or even thousand five hundred foot increments. A series of two 45 degree banked 360 degree turns should be accomplished in each direction and once plus or minus 100 feet in altitude can consistently be maintained, the next section may be commenced. If a student is having trouble consistently maintaining altitude within ACS tolerances, most likely they are looking inside at the instruments too much instead of outside at the horizon. Outside visual reference should be maintained 80% of the time during the maneuvers 20% inside for the gauges. Clearing turns should be emphasized between each maneuver [slow flight, stalls, steep turns.]

### **Flights 7-15**

1. Emergency Descents and simulated engine failures should be introduced first in this section and then practiced throughout these lessons. Under no circumstances or at any time while flying at BSFT should any flight instructor or student SIMULATE an engine failure or cause an engine to be shut down by bringing the mixture to idle cut-off, turning the fuel selector to the off position or turning the magnetos to the off position. Simulated engine failures are rather to be accomplished by bringing the THROTTLE to the idle cutoff position with the carburetor heat on and periodic clearing of the engine should be accomplished every one to two minutes. Engine clearing shall be accomplished by smoothly and not too briskly a pace, bringing the RPM to the green arc [2100] for a second and then in a similar fashion back to idle. 2. Ground reference maneuvers including Rectangular course, turns around a point and S-Turns across a road should be introduced and

practiced in this section. Special emphasis on an emergency landing spot shall be discussed for safety, just in case there is some form of engine trouble, since you will only be about 1000 feet AGL. 3. Slips to a landing can also be introduced in this section and should first be practiced at altitude using a highway or straight line reference on the ground as a starting point to the maneuver. Placards in the Company Cessna 172M's read "Avoid slips with flaps extended" however emphasis to the student should be made that in a real emergency, if too high for the emergency landing spot, a slip with flaps can be accomplished. You can practice slips at altitude with 10 or 20 degrees flaps extended. 4. Then, after all the aforementioned have been practiced to proficiency, we then start working on landings. Usually, I find it takes anywhere from between 20-80 landings before the student is proficient. Once they are relatively proficient at landings I will introduce go-around's and I will also complete multiple power off 180's with throttle being pulled at mid field downwind. I personally judge someone is ready to go solo when they can show me at least 10 consecutive good landings, without me intervening on the controls what so ever. Then, they can start flying solo concurrently to the next sections if desired.

### **Flights 15-25**

1. After the student has completed the milestone first solo, I then introduce them to a lesson or two of Short Field and soft field Takeoffs and landings including slips to landing and anytime thereafter you can be looking out for crosswind landing days. 2. Then, I take them to a tower controlled field for the next one to two flights. Usually I go to Wiley Post and then to Stillwater so they can work on touch & go's at the tower controlled airport and work on acclimating to doing landings at a different airport. 3. After the tower work, I then start the dual cross country phase. All students should be shown how to use the VFR NAV LOG flight planning sheets, E6B, Plotter and sectional chart for cross country flight planning as their PRIMARY means of navigation. This ground session should generally take 2.0-3.0 hours. If the student wants to use an iPad or equivalent device, the instructor may allow that and extend the ground session length to include device operation if both parties are

willing and able. However, at BSFT we strive to create THE best and safest pilots possible and heavy reliance on automation i.e. geo-referenced aircraft on devices is not the way to do that. Old school pilotage and dead reckoning with a section chart, a clock and their own eyes, creates a much safer and better pilot than one that just blindly follows magenta lines plus, cross country flight planning is tested on the written exam. For this ground section, I would explain to the student where to get and how to interpret the weather and I show them how to calculate the weight and balance and performance charts contained in the applicable POH. I also show them how to call Flight Service to get a weather briefing and file a flight plan via 1-800- WX BRIEF because that is what I have used for almost 25 years of personal flying and at least one of the main DPE's BSFT uses, has the applicant call that number for both the Private and Instrument checkrides. 4. Fly the dual cross countries in two or three lessons. My favorite go-to cross country is Weatherford. It is somewhat hard to find and it is not too long of a cross country yet not too short. For the next dual cross country I use Guthrie to McAlester to Stillwater which will then later be flown on their triangular long solo cross country flight. As mentioned in the safety procedures, all students will be taught how to and receive VFR Flight following and open a flight plan. 5. After flying the cross countries with the student, before cutting them loose to fly it on their own, at least one of the three hours of simulated instrument time should be accomplished and the remaining two hours should be accomplished concurrently to them flying solo cross country or shortly here after. 6. Night time. I generally do night in two lessons no matter what time of year it is. For the first night lesson I have them do 8 full stop taxi back landings at Guthrie. This should generally take about 1.3 hours on the hobbs leaving 1.7 hours needed to fulfill the remaining night requirements. For the night cross country, I generally go to Clinton Regional, Clinton Sherman, Weatherford or whatever meets the time and distance requirements. 7. The final two or three flights shall be used as the 3 hours within 2 calendar months prior to the checkride and should include everything that will be on the checkride which includes slow flight, stalls, steep turns, emergency descent, simulated engine failure with a slip into the simulated landing field, ground reference maneuvers,

short and soft field take off and landings, basic attitude instrument flying including unusual attitudes, cross country checkpoints, cross country diversions and VOR Tracking. The most difficult task of the private pilot however seems to be the short field landing so, after all the aforementioned have been revisited, spot landings will most likely be the emphasis for the completion of training prior to the checkride.

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