

Country Skies Aviation

General operations manual

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List of revisions

General:

This guide contains policies and procedures applicable to all Country Skies Aviation (“Country Skies”) flight operations. Material contained herein applies to all pilots operating Country Skies aircraft, representatives and clients and their passengers. In addition to the policies and procedures contained herein, all flight training operations must be conducted in accordance with Federal Aviation Regulations, and the aircrafts Pilot Operating Handbook.

The Purpose of this manual is to assure the safety and efficiency of Country Skies flight operations. All pilots must review the practices and procedures and supplemental documents as a matter of normal preflight activity and are responsible for complying with all regulations and procedures outlined.

Compliance by instructors, students and renters (and their passengers) with the rules and policies stated in this guide and the other policy documents stated above is mandatory. Failure to comply may result in loss of access to Country Skies aircraft and facilities.

Facility:

Country Skies is in the Matt Aviation hangar located at the end of Styles way in Lagrangeville NY. When driving to the facility on Styles Way, there is a gate located approximately 700 feet from the hangar. If the gate is closed, you may open it. When leaving the facility, the gate may be left unlocked if there are other people at the hangar. If you are the only one at the property, please close the gate behind you on the way out.

Keys to the office and hangar will be given out at Country Skies’ discretion. If you have keys to the facility, please make sure to lock all doors after use and ensure all lights are turned off when leaving for a flight or leaving for the day. (Unless others are there)

There is a garbage can in the office and a dumpster outside in the parking lot. If you notice the garbage is full, please empty it in the dumpster outside.

If you notice one or two quarts of oil left in the office, please notify management so more can be ordered.

There is a thermostat in the main hallway upstairs. In the winter you can turn the heat up. When you are done for the day and leaving, turn the heat down to 50. There is a small portable floor heater in the office. In the winter you can turn that on, leave it running during the day and keep the office door closed. It will heat the room up fast. In the summer, keeping the office window open is usually enough to keep the office fairly cool.

If you go the bathroom and notice it is out of something. (Ex: toilet paper) Please let management know so more can be obtained.

Keep the office and hangar clean.

Passengers or visitors are not allowed onto any taxiways or runways at any time. The instructor must communicate this effectively to anyone who is present at the hangar. If there are visitors who will be waiting at the facility while a flight is being conducted, the instructor must explain where the people are permitted and not permitted to go.

Smoking at the facility, inside, in the aircraft, or on the ramp is prohibited.

Documents and record keeping

The flight school will obtain and keep a copy of any new flight instructors following documents,

- Commercial pilots certificate
- Flight instructors certificate
- Current medical certificate
- Government issued photo ID
- Copy of pilot history insurance form
- Flight school security awareness training certificate

These documents should be kept for each flight instructor. The link to take the flight school security awareness training is <https://info.natacs.aero/online-training/flight-school-security-awareness-training> and must be completed within the first 60 days of hire.

Each flight instructor MUST obtain a copy of the document used to verify each students US citizenship and give to the school to retain. These can be physical or digital copies. Acceptable forms of ID include a valid, unexpired US passport, an original government issued certified birth certificate. Ideally, obtain a photo and then print out the picture and file in office. (Bottom right desk drawer.

Preflight procedures:

Instructors must arrive at least 15 minutes before their first flight of the day to open up the facility, and to check over the airplane (Timesheet, squawks, condition)

It is each pilot's responsibility to ensure all required documents are in the aircraft and that the log sheet for the Hobbs and Tach times is accurate and up to date prior to flight. If a discrepancy is found in the binder or with the aircraft documents attempt to find the cause of the problem. If no solution is found contact management.

Flight operations:

Flight operations will be conducted in accordance with the FAR's. Always obtain a legal weather briefing as well as check all NOTAMS and TFR'S prior to flight.

Every flight will be dispatched and checked in via **Flight Circle** with the appropriate Hobbs and Tach times entered.

Sky Acres provides a unique set of challenges. There is no automated weather reporting for the airport. The METAR and TAF from KPOU should be used when checking the weather at Sky Acres. The KPOU ATIS can usually be picked up by radio when up at the fuel pumps or in front of the hangar with the squelch on the radio pulled.

Runway 17 has a large 1.33% upslope and there are no PAPI's or VASI's. This can create optical illusions when landing runway 17 at night.

There is no airport beacon and no taxiway lights. This can make the airport difficult to find at night. The string of power lines on the departure end of 35 is lit up with red lights at night and can be seen from far away in any direction except when approaching from the southeast. There is no fence surrounding the airport and at night there is heavy wildlife activity on and in the vicinity of the runway. Utilize short field takeoff and landing techniques when operation at night

and avoid touch-and-go's or repeated landings at night.

The Class D extension from KPOU comes very close to 44N. There is 3 nautical miles of space between the airport and the beginning of Class delta on the west/southwest side of the field. Beware when approaching from the east and overflying the field for a teardrop entry into the downwind for runway 35. There is not much room to complete the maneuver.

Additionally, the RNAV 24 into KPOU brings aircraft directly over the top of Sky Acres down to 2400 MSL (ZIDLU). Do not be surprised to see jets crossing the field at what appears to be a "lower" altitude than expected as they are executing the procedure listed above. Be especially alert upon executing a crosswind to teardrop entry at the recommended altitudes of 500 to 1000' above pattern altitude.

Avoid pattern work before 8am and after 8pm.

Post flight operations:

Try to time your flight to have the aircraft re fueled and back at the hangar by the end of your time slot or before. Example: If you have the aircraft from 1-3pm, do not land at 3pm and then taxi to the fuel pumps and re-fuel the airplane as it will result in a delay for the next flight. Try to get back at 2:45pm to provide enough time to put gas in the plane and have it back at the hangar by 3.

If the same credit card is swiped more than 3 times per day at the fuel pumps, the machine will flag it as a fraud charge and deny the purchase. (Hergin aviation said there is nothing they can do about it) Therefore on busy days the use of multiple credit cards will be required for re fueling operations. Receipts are not required when refueling at Sky Acres or any other airports. If the company card doesn't work, please use your own card, note it in the log and insert the receipt in the binder in order to properly credit your fee.

When exiting the aircraft ensure all switches are off and all trash and personal items are removed from the aircraft.

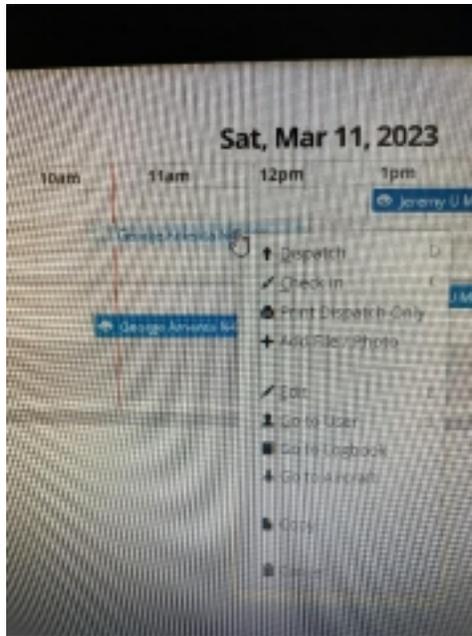
When moving aircraft, ensure proper clearance on all sides. If you are pushing the aircraft and a collision seems imminent, stop the push and visually inspect the distance remaining.

The total cost of the flight will be calculated by flight circle after the appropriate Hobbs and Tach times are entered. Please try to have the customer pay the full balance at the completion of each flight. Cash, check, credit card, Zelle and Venmo are acceptable forms of payment.

Flight Circle usage:

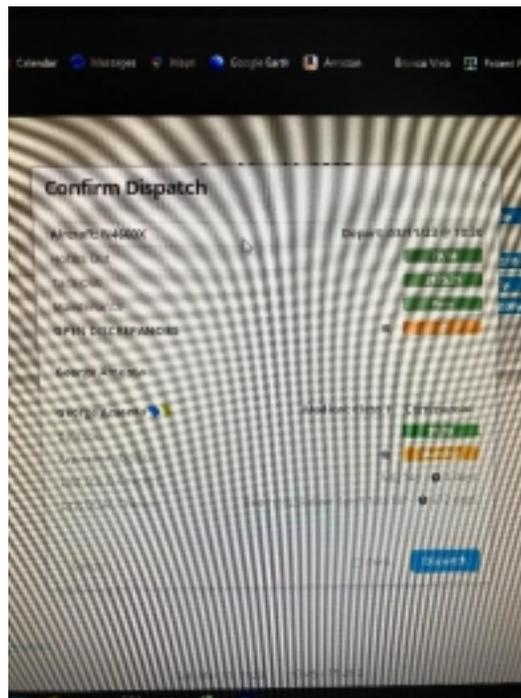
At the completion of a flight, the aircraft times must be entered into flight circle in order to keep track of maintenance and to calculate flight time for billing purposes. The steps to check in a flight are as follows.

- Click on the flight and click "dispatch"

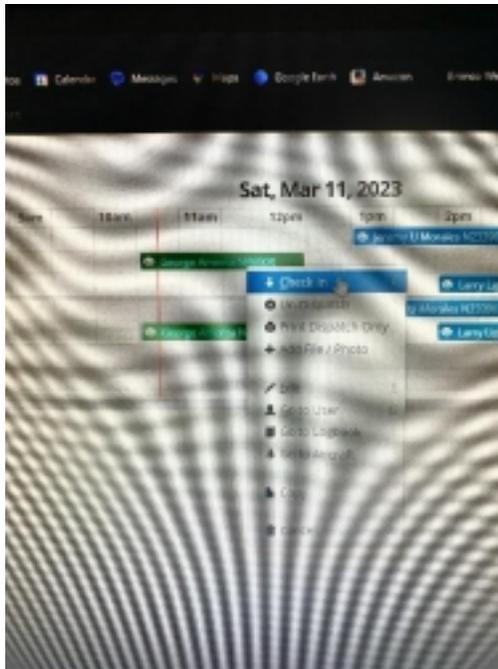


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- Note the hobbs and tach times and verify them with the starting hobbs and tach times in the aircraft binder.
- Click “Dispatch”

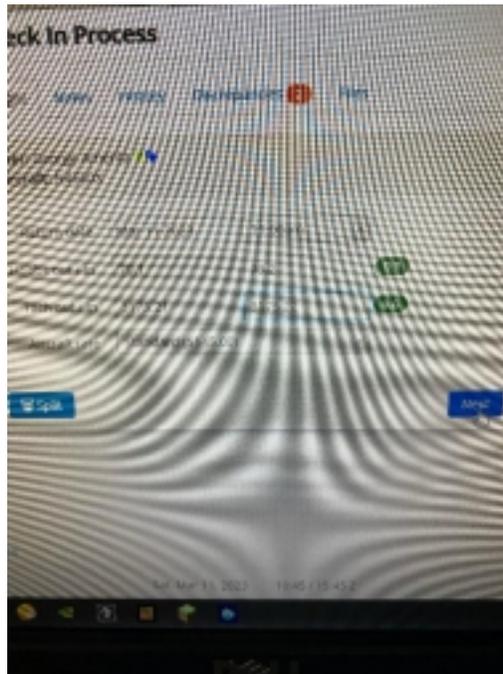


- Click on the flight again and click “check in” selecting “un-dispatch” will un dispatch the flight and undo the first 3 steps listed above.



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- Once you click “check in” a window will appear asking you to enter the finishing hobbs and tach times from your flight. Enter these values and click “next” TWICE.



- You should then be on a page that lists the total flight hours and has a blank section with total ground hours. Enter your ground time here and then click “next”

Billing:

-Flight time will be automatically calculated in flight circle once the hobbs and tach times are entered.

-Billing of ground time is entered separately.

-Late students will be billed the time they are late in ground time. For example, if a student was 15 minutes late, they should be billed for 0.2 or 0.3 of ground. Instructors are responsible for explaining this to their students when they first begin training.

-No shows or cancelations within 30 minutes of start time may be charged 1 hour. Once again instructors are responsible for explaining this to their students when they first begin training.

Instructor professionalism:

-Uniform: There is no required uniform but dress appropriately. Business casual is preferred. Shorts are acceptable in the summer.

-Show times: Arrive early for the first flight of the day. Instructors must show up at least 15 minutes early for the first flight of the day to open up the facility, and to check over the airplane (Timesheet, squawks, condition)

-Timing of lessons: Do your best to keep lessons on time. If you have a flight from 12-2 and then 2-4, how you conduct the first flight will determine if the second flight will be delayed or not. Think of things such as if the plane will need to be refueled in between flights and the debrief after. Return to the airport so that you can have the plane re fueled (if necessary) and shut down on the ramp by or before the start time for the next lesson. Do your best to be early or on time.

-Appearance standards: Keep the office, aircraft, and hangar clean. Keep a rag under the crank case breather line if plane is in the hangar. Remove trash from airplanes and office.

Communication:

-Discovery flights: When a discovery flight is purchased, instructors will be reached out to individually based on availability to schedule.

-Facility: Any questions or issues regarding the facility such as no heat, loss of power, in the office or hangar, etc should be reported to either Luc or Clayton Livingston.

-General questions or issues: Any general questions or issues regarding any part of the operation should be directed to management.

Maintenance:

-Aircraft maintenance: If the instructor or a renter discovers a maintenance issue with the airplane, they should squawk it in Flight Circle and notate it on the aircraft squawk sheet in the binder. They should then communicate the issue to management, preferably by phone. Instructors should have maintenance's phone number but should avoid continually calling and asking questions every time something is broken. If something such as a navigation light is broken, creating a squawk and notifying management is all that is required. If you are on a cross country at a distant airport and cannot get the engine to turn over, then a call to maintenance would be appropriate. If you are at Sky Acres and an issue requires grounding of the aircraft, create a squawk, ground the aircraft in Flight Circle, and notify management.

If a maintenance issue is critical to safety of flight and requires grounding of the aircraft place the "Aircraft grounded" placard located in the aircraft binder inside the airplane to alert other pilots to avoid flying. Such placard should then not be removed without the approval of the

Chief Instructor.

To “ground” an aircraft in Flight Circle simply create a new reservation for the aircraft and select “Maintenance” Add a reason for the grounding in the “Public notes” section. Select an ending time as appropriate.

The image shows a screenshot of a web application interface for creating a new reservation. The title is "New Reservation". Below the title are tabs for "Reservation", "Options", "Discrepancies", "Notes", and "Files". The "Reservation" tab is active. The form contains the following fields:

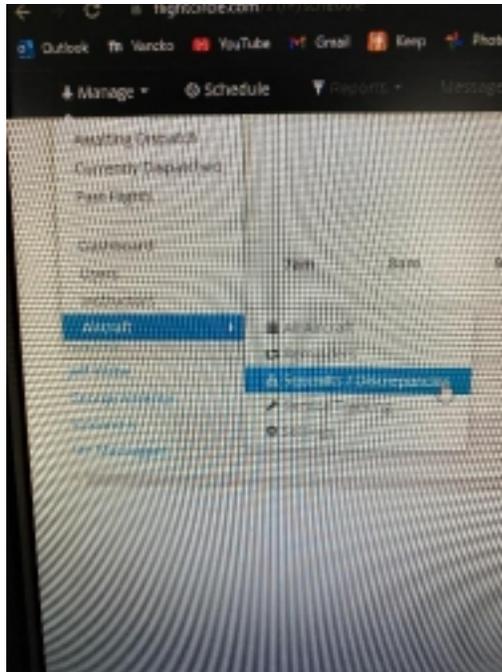
- Reservation:** A dropdown menu with "Maintenance" selected.
- Start:** A date and time field set to "03/07/2023 12:00pm".
- End:** A date and time field set to "04/01/2023 12:00pm".
- Repeat:** A field set to "03/07/2023 - 04/01/2023".
- Schedule type:** A dropdown menu set to "Maintenance".
- Round:** A dropdown menu set to "1".
- Public notes:** A text area containing "Aircraft grounded".

A blue "Save" button is located at the bottom right of the form. At the bottom of the page, there is a footer that reads "© 2023 Flight Circle".

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-Squawks in Flight Circle.

Creating squawks in flight circle is very important as it sends an email to everyone alerting them of the issue. To create a squawk, Select “Manage” in the upper left corner then select “Aircraft” then “Squawks/Discrepancies”



You should then see a screen as pictured below. Verify that the correct tail number is selected. For status select whichever is appropriate for the broken item.

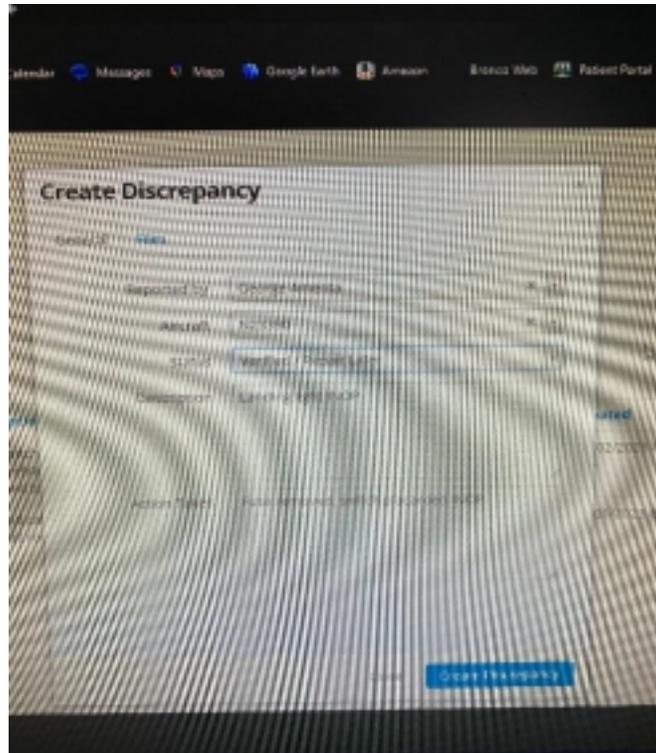
New/Pending would be appropriate for important safety of flight issues that ground the aircraft. Verified/Repair Later would be acceptable for something such as a landing light out or another deferrable item.

Unable to verify should not be used.

Verified/Acceptable as noted would be for something such as an ADF receiver going out. (Something that is broken but does not really need to be repaired)

Verified and repaired would be selected once said issue is remedied.

An example of a new squawk is shown on the following page.



Example squawk in flight circle.

-Steps when dealing with a broken item.

1. Determine safety of flight and if the aircraft is airworthy for the given operation (91.205)
2. Deal with aircraft and broken item appropriately (91.213)
3. Squawk issue on squawk sheet in aircraft binder and place aircraft grounded placarded in aircraft if applicable.
4. Squawk issue in flight circle
5. Ground aircraft in flight circle if applicable.

Flight Instructing Practice Standards:

- Avoid going to airports that charge landing fees
- Avoid refueling at airports with very expensive Avgas
- KPOU, KOXC, and KDXR are all good airports to work on takeoffs and landings and work on ATC communications.
- Full stop taxi back landings only at 20N
- Some of KSWF's tower controllers do not have patience and can be hard on people who are weak on the radios.
- 4B0 (South Albany) is a great cross country and solo cross country destination. 51nm and very easy to navigate to and from.
- The normal practice area is east of the Hudson River and extends from the city of Poughkeepsie to the Kingston Bridge.
- Avoid pattern work before 8am or after 8pm
- Use caution as Sky Acres gets extremely busy on weekends
- Avoid repeated landings at night due to wildlife
- KPOU's ATIS can be picked up at Sky Acres usually with the squelch pulled on the radio.
- Communication with students and management is a must. Instructors and students must both be on the same page before, during and after a lesson. If something was unsatisfactory, let the student know. Same goes for management. If we are out of a certain supply, or something doesn't work right, let someone know.

New student checklist

- *After the first flight*
 - Obtain their email address and send to management. This will get them access to **Flight Circle**.
 - Explain to them that you will help them schedule their next lesson via text or phone and then will show them how to schedule in **Flight Circle** once their account has been created.
- *Before the second flight*
 - Verify US citizenship and give the student the TSA endorsement. Acceptable forms of ID for this include a valid, unexpired US passport, an original government issued certified birth certificate. A copy of the document used MUST be obtained. The school is required to keep a copy of the document used to verify citizenship. Obtain a copy by either asking the student to bring a copy of the document used, or take a picture of the document used and email/text it to management.
- *After second flight*
 - Introduce them to the syllabus and explain it to them.
 - Recommend they find an aeromedical examiner and discuss which class medical to get. Refer them to <https://www.faa.gov/pilots/amelocator>.
 - Dr. Raymond Basri is a good one. He has an office in Middletown. There is also an AME in Wappinger Falls.

Middletown Office, NY (upstate)

236 Crystal Run Rd Suite 2

Middletown, NY 10941

Phone: **845-692-3100**

-Introduce them to the 2 FAA Publications: Pilot's Handbook of Aeronautical Knowledge (PHAK) and the Airplane Flying Handbook (AFH)

-Encourage them to get started on an online ground school right away. Sporty's Learn to fly course is an excellent one in preparing for the written and teaching overall general knowledge.

-Show them the IACRA website and instruct them to go home and make an account. You will need this to be done before you can obtain their student pilot certificate.

Country Skies Aviation Training Syllabus

Use of syllabus:

The use of a syllabus for flight training is extremely important for both the student and instructor. All too often, students go through flight training having no idea what's required, what the next lesson is, and how far along they are in the overall journey to obtain a specific rating. This is why we use a syllabus.

The syllabus is designed to serve as a general guide for the instructor while remaining flexible to suit students and operational and learning needs. The syllabus is broken down into fourteen main units. But the order in which each unit is completed is a combination of FAR 61 and instructor discretion. Each unit is broken down further into a ground and flight section. Each subject and maneuver has a corresponding page and chapter to either the airplane flying handbook (AFH) or pilot's handbook of aeronautical knowledge (PHAK). This allows the instructor to easily assign reading for certain maneuvers or ground discussion topics.

Each line of the syllabus also contains check boxes. The point of these is it allows the student to track their own progress. For example, unit two "upper air work" is about learning slow flight, steep turns, stalls, emergency procedures, and ground reference maneuvers. Now the instructor knows this is normally some of the first things that are worked on but with the syllabus, the student is now able to see what needs to be accomplished and can check off each item after its completion.

The syllabus contains a pre solo written exam. This a basic one that the instructor can use, or can modify and make their own. There are also two additional checklists towards the end of the syllabus. One labeled "Pre-Solo flight training certification-FAR 61.87 (d)" which lists the pre solo requirements straight from the FAR's. The second checklist labeled "Pre solo cross country training certification FAR 61.93 (e)" lists the pre solo cross country requirements right from the FAR's. The purpose of these two checklists is safety and to allow both the instructor and student to track their progress towards the first solo and first solo cross country. The student shouldn't have to ask "When do I solo?" All they have to do is look at the pre solo checklist and identify the tasks that still need to be completed.

The final and last part of the syllabus is the "Private Pilot ASEL maneuver tolerances". This document lists all the flight maneuvers and check ride tolerances straight from the ACS. This serves as an "end goal" for the student. The parameters for all the maneuvers that they will need to fly on the check ride. That way they know for example that their steep turns need to have bank within five degrees, altitude within one hundred feet, airspeed within ten knots, and roll out on the entry heading within ten degrees.

The point of the syllabus is to create transparency in the training process and serve as a check system for both the student and instructor. The entire Country Skies private pilot syllabus is attached below. The essence of this Part 61 Training Program is the ability to tailor a flight training program to fit the varying requirements of a particular student, training environment and training aircraft. Additionally, it is recognized that flight instructors or Part 61 flight schools many times have differing teaching techniques and different approaches to various aviation subjects that work best for their style of instruction and training location.

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Part 61 Private Pilot Training Program

The goal in providing a Part 61 Private Pilot Training Program is to:

- 1) Develop a safe FAA Certified Private Pilot,
- 2) In a time commensurate with the amount of time the student has to devote,
- 3) At the lowest reasonable cost.

During any aviation training program certain challenges are present. Inclement weather, unforeseen maintenance issues with aircraft, availability of flight instructors and varying student availability and progress to name a few. The students of a Part 61 Private Pilot Training Program are part-time students and as a result these challenges are sometimes increased.

Thus: The purpose of this Private Pilot Training workbook is to:

- 1) Provide the student with a guide describing the content of the training and, as best as possible, the typical sequence of that training, and
- 2) Provide the student's flight instructor (or flight instructors) with a comprehensive record of the specific training the student has received to track progress and to avoid unnecessary duplication of training.

Your flight instructor assumes a great deal of responsibility for your training. His or her decisions will shape your aviation future and will hopefully inspire you for a lifetime of accomplishments. We hope you enjoy the training you receive. If there are any questions you have about your flying experience, please feel free to discuss it with your flight instructor at any time.

The student will keep this workbook with his or her logbook and may make notes in it as necessary. The flight instructor will make the entries in this workbook as the student progresses through the program.

Things you will need to do:

- 1) Present your driver's license and your birth certificate or your passport to your flight instructor,
- 2) Make an appointment for an FAA Third Class Medical examination with an FAA certified Aviation Medical Examiner (Your flight instructor will provide a list of Aviation Medical Examiners)
- 3) Register on the FAA website IACRA to obtain your unique FTN and apply for your student pilot license.

Things you will need to get:

Headset

Log Book

New York Sectional Chart

FAR/AIM

Flight Planning Plotter

Flight Computer

In the first few flight sessions your Flight Instructor will do the following:

1. Explain this Private Pilot Training workbook
2. Certify that you are a U.S. Citizen in your Log Book
3. Explain the necessity of a FAA Medical Certificate
4. Explain suitable training weather at the training airport and how to check the weather

Useful websites

-Federal Aviation Agency (FAA) <http://www.faa.gov/>

-Aircraft Owners and Pilot's Association (AOPA) <http://www.aopa.org/>

-Aviation weather center <https://www.aviationweather.gov/>

-Sportys pilot shop <https://www.sportys.com/>

-Pilots handbook of aeronautical knowledge (PHAK)
https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/

-Airplane flying handbook (AFH)
https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/airplane_handbook/

The Private Pilot Training

The basis of the private pilot training program is the progress checklist which follows in this workbook. As the student progresses through the training program, the instructor will check off the various units started and completed allowing for a quick reference as to where the student stands in his or her training.

The student will progress through the discovery phase then the preparation phase at the end of which the student will be ready to take the FAA practical test with an examiner and earn a private pilot certificate.

Each phase of the training program is made up of several “Units of Instruction.” Some of these units are mandatory for the phase; the sequence for others is discretionary as depicted on the progress checklist. The instructor will make the decision as to whether discretionary units of instruction will be addressed in the discovery phase or in the preparation phase. All units shall be completed.

In the discovery phase the student will be expected to complete each unit and demonstrate it to an acceptable degree of safe operation. In the preparation phase the student will be expected to complete each unit and demonstrate it to the Airman Certification Standards (ACS); i.e. to the standards expected by an FAA Examiner.

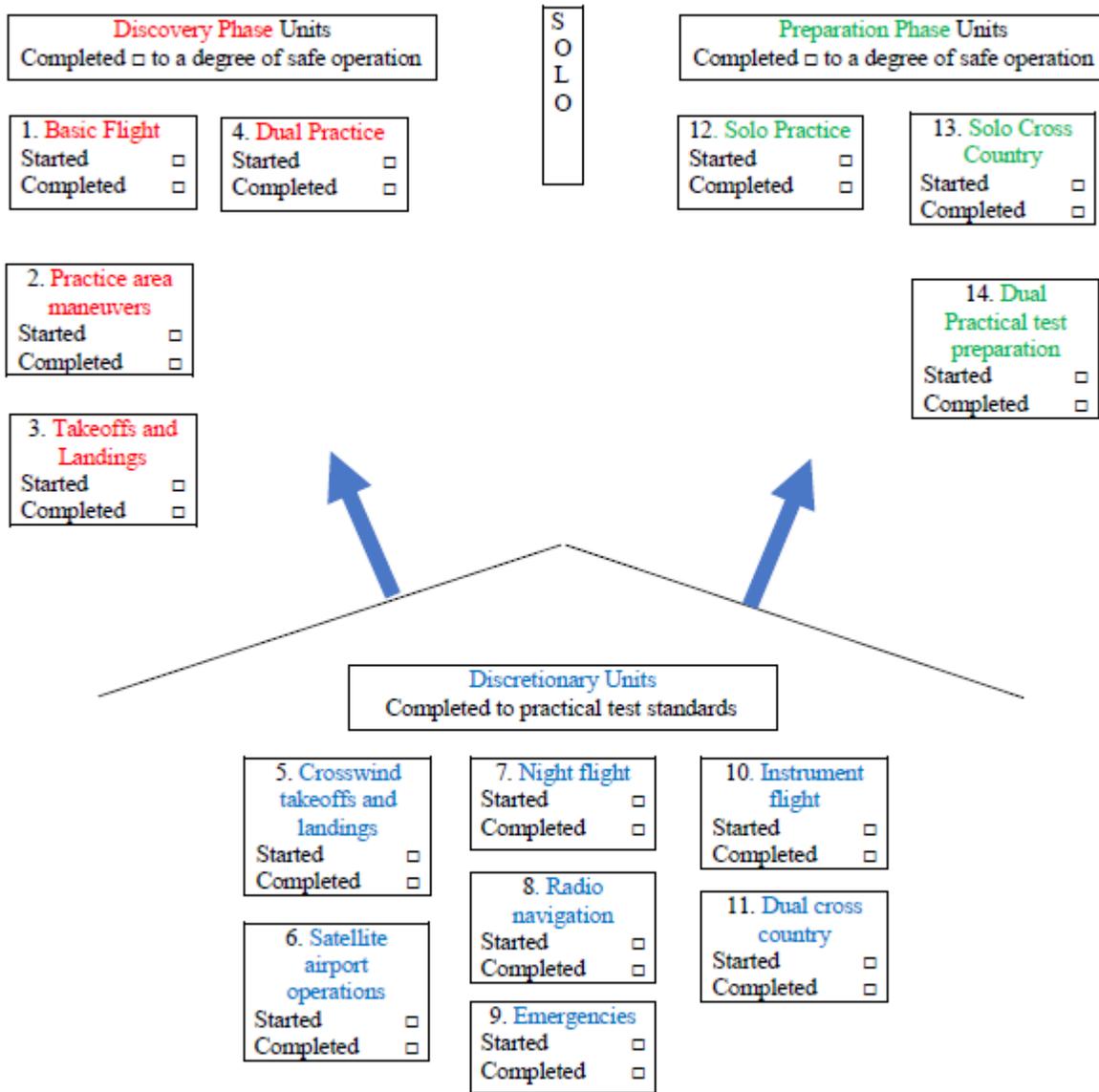
The progress checklist is supplemented by a more detailed description of the content of each unit of Instruction. This detailed description is described in the outline of unit content and completion. In this outline each unit is composed of flight maneuvers and ground discussions and may take only one lesson to complete. However, many of the units may take several lessons to complete satisfactorily. The flight instructor will be the judge as to the achievement of each unit to the required standard.

An important note to the training program is that the completion of a particular unit of instruction is not necessary to the commencement of another unit of instruction. Your flight instructor will make the decision as to the content of each lesson and from which unit of instruction the lesson will be based.

Each lesson will be preceded and concluded by a ground discussion of varying length. Some may be quite lengthy; others may be only a few minutes. At the end of each lesson the flight instructor will discuss with the student the next lesson.

There are sure to be occasions where following the “next lesson plan” may not be possible for various reasons. When these occasions occur, it will be the responsibility of the student to have such a working knowledge of the entire training program so as to be able to absorb unplanned material.

Progress Checklist Diagram



Outline of Unit Content and Completion

Most of the items on this list are presented with the corresponding chapter and page in either the Pilots handbook of aeronautical knowledge (PHAK), airplane flying handbook (AFH), or the Federal aviation regulations/aeronautical information manual (FAR/AIM). It is suggested that students complete some of this reading before a given lesson. Consult your flight instructor for more information.

1. Basic Flight

a. Flight Maneuvers

- 1) Checklists and their use Needs Work Completed
- 2) Taxiing (AFH 2-18) Needs Work Completed
- 3) Run-up's Needs Work Completed
- 4) Straight and level flight (AFH 3-6) Needs Work Completed
- 5) Level turns (AFH 3-11) Needs Work Completed
- 6) Dutch rolls for coordination (Optional) Needs Work Completed
- 7) Climbs and descents with turns (AFH 3-17) Needs Work Completed
- 8) Climbing and descending turns with flaps Needs Work Completed
- 9) Vy and Vx climbs (AFH 3-17) Needs Work Completed

b. Ground Discussion

- 1) Preflight walk around preparation Completed
- 2) 4 Fundamentals of flight (AFH 3-1) Completed
- 3) Aerodynamics of lift (PHAK 4-5) Completed
- 4) Aerodynamics of turns (PHAK 5-22) Completed
- 5) Adverse yaw and rudder use (PHAK 6-3) Completed
- 6) Left turning tendencies (PHAK 5-30) Completed
- 7) Aircraft systems (PHAK 7-2) Completed
- 8) Aircraft powerplants (PHAK 7-2) Completed
- 9) Air traffic control communications (PHAK 14-2) Completed
- 10) Airport operations (PHAK 14-2) Completed

2. Practice area maneuvers

a. Upper Airwork

- 1) Slow Flight with flaps (AFH 5-9) Needs Work Completed
- 2) Steep turns (AFH 10-1) Needs Work Completed
- 3) Power-off stalls (Approach stalls) (AFH 5-17)
at full stall and with banks Needs Work Completed
- 4) Power-on stalls (Departure stalls) (AFH 5-18)
at full stall and with banks Needs Work Completed

- 5) Emergencies (AFH 18-1)
Needs Work Completed

b. Ground Reference Maneuvers

1) Turns around a point (AFH 7-7) Needs Work Completed

2) S turns (AFH 7-9) Needs Work Completed

c. Ground Discussion

1) Pre-flight weather planning and NOTAMS, TFRs (PHAK 13-2) Completed

2) Wind and its effects (Crab Angle) (AFH 7-2) Completed

3) Aerodynamics of stalls (AFH 5-12) Completed

4) VFR Flight Completed

5) Collision avoidance, and wake turbulence (PHAK 14-26) Completed

6) Spin awareness and recovery (AFH 5-22) Completed

3. Takeoffs and landings

a. Takeoffs

1) Normal takeoffs (AFH 6-3) Needs Work Completed

2) Specialty takeoffs

A) Short field takeoffs (AFH 6-11) Needs Work Completed

B) Soft field takeoffs (AFH 6-13) Needs Work Completed

b. Landings

1) Normal landings (AFH 9-2) Needs Work Completed

2) Specialty landings

A) Short field landings (AFH 9-20) Needs Work Completed

B) Soft field landings (AFH 9-23) Needs Work Completed

c. Lining up with the runway Needs Work Completed

d. Slips to a landing and slips to lose altitude (AFH 9-12) Needs Work Completed

e. Introduction to cross-wind takeoffs and landings (AFH 9-15) Needs Work Completed

f. Go arounds (AFH 9-10) Needs Work Completed

g. Ground discussions

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1) Traffic patterns with entries and departures (AFH 8-1) Completed

- 2) Approaches (AFH 9-2) Completed
- 3) Flares (AFH 9-8) Completed
- 4) Touch downs (AFH 9-9) Completed
- 5) Takeoff and landing performance charts (PHAK 11-19) Completed
- 6) Effects of wind; Use of crosswind component charts (PHAK 11-25) Completed

4. Dual practice

a. Flight maneuvers

- 1) Review of introduced maneuvers Needs Work Completed

b. Ground discussions

- 1) Lost procedures (PHAK 16-34) Completed
- 2) Loss of radio communications Completed
- 3) Emergencies 9 (AFH 18-1) Completed
- 4) Pilot-in-Command attitude and ADM (PHAK 2-2) Completed

5. Cross-wind takeoffs and landings

a. Cross-wind takeoffs (AFH 6-6)

- 1) Ground roll (AFH 6-6) Needs Work Completed
- 2) Climb out crab (AFH 6-7) Needs Work Completed

b. Cross-wind landings (AFH 9-15) Needs Work Completed

- 1) Wing low touch down (AFH 9-17) Needs Work Completed
- 2) Ground roll (AFH 9-18) Needs Work Completed

c. Ground discussions

- 1) Use of crosswind component chart (PHAK 11-25) Needs Work Completed
- 2) Wing low vs. rudder kick methods (AFH 9-17) Needs Work Completed

6. Satellite training airport operations

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a. Flight maneuvers

- 1) Pattern entries (AFH 8-1) Needs Work Completed

2) Radio communications (PHAK 14-22) Needs Work Completed

3) Short and soft field operations Needs Work Completed

b. Ground discussions

1) Airspaces (PHAK 15-2) Completed

2) Standard and non-standard patterns (AFH 8-1) Completed

3) Fly over inspections (AFH 8-4) Completed

4) Traffic pattern entries (AFH 8-4) Completed

5) Preflight planning to a new airport (PHAK 14-3) Completed

6) Airport markings (PHAK 14-5) Completed

7. Night flight

a. Flight maneuvers

1) Cross-country (AFH 11-7) Needs Work Completed

2) Full stop landings (AFH 11-10) Needs Work Completed

3) Landing light out operation Needs Work Completed

b. Ground discussions

1) Optical illusions and night vision (AFH 11-1, 11-4) Completed

2) Walk-around inspections at night Completed

3) Cockpit lighting Completed

4) Aircraft lighting and electrical systems (AFH 11-5) Completed

5) Airport lighting (PHAK 14-16) (AIM chapter 2) Completed

5) Night emergencies Completed

6) Night VFR requirements (FAR 61.57, 91.205) Completed

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8. Radio navigation

a. Flight maneuvers

1) Use of VOR radios (PHAK 16-25) Needs Work Completed

2) Use of GPS “Direct To” and “Nearest” functions Needs Work Completed

b. Ground discussions

- 1) ATC help available Completed
- 2) VOR Theory (PHAK 16-22) Completed
- 3) GPS Theory (PHAK 16-30) Completed

9. Emergencies

a. Flight maneuvers

- 1) Before climb out (AFH 18-7) Needs Work Completed
- 2) On climb out (AFH 18-7) Needs Work Completed
- 3) En-route (AFH 18-4) Needs Work Completed

b. Ground discussions

- 1) Aircraft systems (PHAK 7-2) Completed
- 2) Checklist use Completed
- 3) Emergencies from takeoff to cruise (AFH 18-7) Completed
- 4) Off airport landings (AFH 18-2) Completed
- 5) ABCDE engine out checklist Completed

10. Instrument flight

a. Flight maneuvers

- 1) Basic hooded turns Needs Work Completed
- 2) Basic hooded climbs and descents Needs Work Completed
- 3) Hooded unusual attitudes Needs Work Completed
- 4) Escape procedures Needs Work Completed

b. Ground discussions

- 1) VFR to IMC flight (AFH 5-2) Completed
- 2) Spatial disorientation (AFH 5-2) Completed
- 3) Instrument Scans Completed
- 4) Use of ice protection systems in clouds Completed
- 5) Escape plan. (Climb, call for help) Completed

11. Dual cross-country

a. Flight maneuvers

- 1) Into towered airports (PHAK 14-2) Needs Work Completed
- 2) Into non-towered airports (PHAK 14-2) Needs Work Completed
- 3) Lost procedures (PHAK 16-34) Needs Work Completed
- 4) Diversion to alternate airport (PHAK 16-34) Needs Work Completed
- 5) VFR flight following Needs Work Completed

b. Ground discussions

- 1) Use of compass (PHAK 16-5) Completed
- 2) Use of charts and chart supplement (PHAK 14-3) Completed
- 3) Pilotage, dead reckoning and flight planning (PHAK 16-12) Completed
- 4) Lost procedures (PHAK 16-34) Completed
- 5) METARS and forecasts (PHAK 13-6, 13-9) Completed
- 6) Weather briefings and NOTAM briefings (PHAK 13-5) Completed
- 7) Critical weather situations Completed
- 8) Airmets, Sigmet, convective Sigmet (PHAK 13-11) Completed
- 9) Web Weather, AWC, 1800wxbrief (PHAK 13-13) Completed
- 10) Loss of radio communications Completed
- 11) Flight plan and ADM Completed

12. Solo practice

a. Flight maneuvers

- 1) Review introduced maneuvers Needs Work Completed

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b. Ground discussions

- 1) Discuss solo limitations Completed
- 2) 1,000 ft AGL Minimum-ground reference maneuvers Completed
- 3) 2,500 ft AGL Minimum upper air work maneuvers Completed
- 4) Lost procedures (PHAK 16-34) Completed

- 5) Loss of radio communications Completed
- 6) Emergencies (AFH 18-1) Completed
- 7) Entry and exit of the traffic pattern (AFH 8-1) Completed

13. Solo cross-country

a. Flight maneuvers

- 1) Flight preparation Needs Work Completed

b. Ground discussions

- 1) Emergencies (AFH 18-1) Completed
- 2) Loss of communications Completed
- 3) 121.5 MHz - 7700 and 7600 transponder codes Completed
- 4) Lost procedures (PHAK 16-34) Completed
- 5) Diversions Completed

14. Dual practical test preparation

a. Flight maneuvers

- 1) Review all ACS maneuvers Needs Work Completed
- 2) Practice practical test Needs Work Completed

b. Ground discussions

- 1) Review in detail the ACS Completed
- 2) Review of aircraft maintenance records Completed
- 3) Oral test prep review Completed
- 4) Practical test realities Completed

Pre Solo Written Exam

Instructions: Answer each question in the space provided, using the FARs, the AIM, the Airport/Facility Directory, and the Pilot's Operating Handbook. Use the space to the left of the question number to list the reference for each question.

1. What is the maximum gross weight of the airplane in the Normal category?

2. If a glider is converging with an airplane, which has the right of way?

3. What are the limit load factors in both the Normal and Utility categories?

4. What preflight action is required of a pilot prior to a flight?

5. What is the maximum rpm of your airplane?

6. Define an aerobatic maneuver.

7. Generally describe the engine in your airplane.

8. List the definition of careless or reckless operation.

9. What is the oil capacity in your airplane? What is the minimum?

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10. What is the minimum amount of time after the consumption of alcohol a pilot is required to wait? Maximum alcohol content in blood?

11. What would happen to the fuel indicators if all electricity in the airplane was lost?

12. What are the basic VFR weather minimums? What is the minimum visibility for a student pilot?

13. Why is it necessary to drain fuel out of the sumps after refueling and before the first flight of the day?

14. List and describe each of the light gun signals available from air traffic control.

15. Will the engine still run if the master switch is turned off? Why?

16. What are wing-tip vortices (wake turbulence)? Which aircraft produce the greatest? Describe proper avoidance.

17. What documents must you have in your possession to solo an aircraft as a student?

18. During runup, what is the maximum allowable rpm drop? Mags and Carb heat checks.

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19. Draw an airport traffic pattern, labeling each leg and the proper entry and departure points. Which turn direction is standard for an airport traffic pattern?

20. List the traffic pattern altitude, direction of turns, and all radio frequencies for the following local area airports and their runways. Sky acres (44N) and Hudson Valley Regional (KPOU)

21. What is the fuel capacity of your aircraft? How much is usable – full? At the tabs?

22. What is the authority and responsibility of the pilot in command?

23. When are you required to wear a safety belt?

24. When are you permitted to deviate from an ATC instruction?

25. What grade(s) of aviation fuel is/are available for use? What color is each?

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26. When an aircraft is approaching another head- on, each pilot should alter their course to the _____.

27. A(n) _____ on the runway indicates that the runway is closed.

28. Draw the pavement marking requiring you to stop before entering a runway.

29. When is dropping objects from an airplane permitted?

30. The _____ of two aircraft on approach to the same runway has the right of way.

31. What must a pilot do before entering Class D airspace?

32. What is the minimum safe altitude over congested, non-congested, and sparsely populated areas?

33. List the day-VFR weather minimums in Class G, E, and D airspace.

34. List the documents that must always be aboard the aircraft.

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35. When must the aircraft's navigation lights be on?

36. What are you, as a student pilot, required to have before operating in Class B airspace?

37. What is the minimum fuel reserve required for day VFR operations?

38. What are your student pilot limitations regarding carriage of passengers or cargo and flying for compensation or hire?

39. Who has the final authority and responsibility for the operation of the aircraft when you are flying solo?

40. What altitudes should you use when operating under VFR in level cruising flight at more than

3,000 feet AGL?

41. When is a go-around appropriate?

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42. What general steps should you follow an engine failure in flight?

43. List the minimum equipment and instruments that must be working properly in your aircraft for day VFR flight.

44. List the following speeds for your aircraft. V_y V_x V_a Best glide speed. 45.

When do you use carburetor heat? What are the indications of carburetor icing?

46. How do you enter and exit the traffic pattern at your airport? What, if any, radio communications are required?

47. If you receive ATC instructions that you feel may compromise safety or will cause you to violate an FAR, what should you do?

48. In addition to equipment requirements and a student pilot certificate, what other requirement(s), if any, must be met before a student pilot is authorized to fly solo within Class B airspace?

49. On a sectional chart, what does a dashed magenta line around an airport indicate?

50. Can a student or recreational pilot request a special VFR clearance in Class D airspace when visibility is less than three miles? Explain your answer.

Pre-Solo Flight Training Certification-FAR 61.87 (d)

- 1) Proper flight preparation procedures, including preflight planning and preparation, powerplant operation, and aircraft systems;
- 2) Taxiing or surface operation, including run-ups;
- 3) Takeoffs and landings, including normal and cross wind;
- 4) Straight and level flight, including turns in both directions;
- 5) Climbs and climbing turns;
- 6) Airport traffic patterns, including entry and departure procedures;
- 7) Collision avoidance, wind shear avoidance, and wake turbulence;
- 8) Descent, with and without turns, using high and low drag configurations;

- 9) Flight at various airspeeds from cruise to slow flight;
- 10) Stalls from various flight attitudes and power combinations with recovery initiated at first indication of a stall, and recovery from a full stall;
- 11) Emergency procedures and equipment malfunctions;
- 12) Ground reference maneuvers;
- 13) Approach to a landing area with simulated engine malfunction;
- 14) Slips to a landing;
- 15) Go-Arounds.

I hereby certify that my flight instructor and I have reviewed and practiced the subjects and procedures above and that I am comfortable with my knowledge and flight competence in those areas.

Date: _____

_____ CFI Student

Pre-Solo Cross-Country Training Certification-FAR 61.93 (e)

- 1) Use of aeronautical charts for VFR navigation using pilotage and dead reckoning with the aid of a magnetic compass;
- 2) Use of performance charts pertaining to cross-country flight;
- 3) Procurement and analysis of aeronautical weather reports and forecasts, including recognition of critical weather situations and estimating visibility while in flight;
- 4) Emergency Procedures;
- 5) Traffic pattern procedures that include area departure, area arrival, entry into the traffic pattern, and approach;
- 6) Procedures and operation procedures for collision avoidance, wake turbulence precautions, and wind shear avoidance;
- 7) Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown;
- 8) Procedures for operating the instruments and equipment installed in the aircraft to be flown, including recognition and use of the proper operational procedures and indications;
- 9) Use of radios for VFR navigation and two-way communications;
- 10) Takeoff, approach, and landing procedures, including short-field, soft-field and crosswind takeoffs, approaches, and landings;
- 11) Climbs at best angle and best rate;
- 12) Control and maneuvering solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids, and ATC directives.

I hereby certify that my flight instructor and I have reviewed and practiced the subjects and procedures above and that I am comfortable with my knowledge and flight competence in those areas.

Date: _____

_____ CFI Student

Private pilot ASEL maneuver tolerances

The standards for these maneuvers were taken from the private pilot airman certification standards (ACS). For further information please consult the official document [available from the FAA](#).

Traffic pattern - Maintain traffic pattern altitude, ± 100 feet, and the appropriate airspeed, ± 10 knots.

Normal takeoff and climb - Maintain VY $+10/-5$ knots to a safe maneuvering altitude.

Landing and go around - Maintain manufacturer's published approach airspeed or in its absence not more than 1.3 VSO, $+10/-5$ knots with gust factor applied. Touch down at a proper pitch attitude, within 400 feet beyond or on the specified point, with no side drift, and with the airplane's longitudinal axis aligned with and over the runway center/landing path.

Steep turns - Roll into a coordinated 360° steep turn with approximately a 45° bank. Maintain the entry altitude ± 100 feet, airspeed ± 10 knots, bank $\pm 5^\circ$, and roll out on the entry heading $\pm 10^\circ$.

S turns, turns around a point - 600 to 1,000 feet AGL at an appropriate distance from the selected reference area. Maintain altitude ± 100 feet; maintain airspeed ± 10 knots.

Pilotage and dead reckoning - Maintain the appropriate altitude ± 200 feet and heading $\pm 15^\circ$.

VOR navigation - Maintain the appropriate altitude ± 200 feet and [heading \$\pm 15^\circ\$](#) .

Slow flight - no lower than 1,500 feet AGL. Establish and maintain an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in a stall warning (e.g., airplane buffet, stall horn, etc.). Maintain the specified altitude, ± 100 feet; specified heading, $\pm 10^\circ$; airspeed, $+10/-0$ knots; and specified angle of bank, $\pm 10^\circ$.

Power off Stalls - Select an entry altitude that will allow the Task to be completed no lower than 1,500 feet AGL. Maintain a specified heading $\pm 10^\circ$ if in straight flight; maintain a specified angle of bank not to exceed 20° , $\pm 10^\circ$ if in turning flight, while inducing the stall.

Power on stalls - Select an entry altitude that will allow the Task to be completed no lower than 1,500 feet AGL. Maintain a specified heading $\pm 10^\circ$ if in straight flight; maintain a specified angle of bank not to exceed 20° , $\pm 10^\circ$ if in turning flight, while inducing the stall.

Simulated IFR - Maintain altitude ± 200 feet, heading $\pm 20^\circ$, and airspeed ± 10 knots.

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Constant airspeed climbs - Level off at the assigned altitude and maintain altitude ± 200 feet, heading $\pm 20^\circ$, and airspeed ± 10 knots.

Constant airspeed descents - Level off at the assigned altitude and maintain altitude ± 200 feet, heading $\pm 20^\circ$, and airspeed ± 10 knots.

Turns to headings - Turn to headings, maintain altitude ± 200 feet, maintain a standard rate turn, roll out on the assigned heading $\pm 10^\circ$, and maintain airspeed ± 10 knots.

Emergency descent - Use bank angle between 30° and 45° to maintain positive load factors during the descent. Maintain appropriate airspeed $+0/-10$ knots, and level off at a specified

altitude \pm 100 feet. Complete the appropriate checklist.

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Cold weather operations: This section discusses operations during winter and at colder temperatures.

-Pre heating: Our aircraft has an electric engine block and oil pan heater. When the temperature is below 40 degrees Fahrenheit, the aircraft engine shall be heated via the built in heater. The heater take approximately an hour to warm the engine up. If the aircraft is outside, install the cowl plugs when plugging in the engine. This will speed up the heating process.

-Snow and ice contamination: DO NOT fly any aircraft that is contaminated with snow, ice, or frost. Do not rub frost of the surfaces. It will need to be removed by heat or a deicing product that can only be applied by the chief instructor.

Loaner headsets for students: There are a few headsets the school has for students to use before they purchase their own. These headsets should be kept in the office when not in use. Do not leave them in the airplanes. Do not let students take the headsets home.