

# **Regal Air Student Pilot Handbook 2022**

For the Private Pilot Training Program  
(Parts 61 and 141)



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Regal Air Student Pilot Handbook 2022

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## Preface

### **Welcome to flight training at Regal Air!**

This handbook contains important information for student pilots seeking a Private Pilot certificate at Regal Air. Safety is the highest priority in flight training; in this book you will find some of the procedures Regal Air uses to ensure safe flight operations.

The procedures and limitations contained in these pages are meant to supplement information provided by the Federal Aviation Administration and the aircraft manufacturers regarding the safe operation of airplanes. This handbook does not replace the training provided by your Flight Instructor.

Feel free to print this handbook and use it as a reference during your flight training at Regal Air.

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# **I. Flight Training at Regal Air**

## A. The Private Pilot Flight Training Program

Flight Instructors at Regal Air adhere to the Jeppesen Private Pilot Syllabus. This program consists of three stages each of which concludes with a “Stage Check”. You will also take an “End of Course Check” upon program completion to confirm you meet the Airman Certification Standards (ACS) for the FAA Private Pilot – Airplane Single-Engine Land (ASEL) Practical Test.

The first stage focuses on the fundamentals, safety of flight, normal procedures, and certain emergency procedures. The goal of this stage is to become proficient enough to complete your first solo flight in the traffic pattern. The stage concludes with the Stage 1 Check in which your ability to perform maneuvers in the practice area on your own is evaluated.

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**Solo Flight:** A flight in which the student pilot is the pilot in command with no instructor or passengers on board.

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The second stage consists of more advanced training. You will learn to fly at night and how to navigate using pilotage, dead reckoning, VOR, and GPS navigation. You will also learn more advanced procedures such as taking off and landing at smaller airports and grass runways. You will also learn how to safely plan and perform cross-country flights. The stage concludes with the Stage 2 Check in which your ability to act as pilot in command (PIC) in a cross-country flight is evaluated.

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**Cross-Country Flight:** A flight performed to another airport. For certification purposes, these flights must be to an airport at least 50nm away.

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**Pilotage:** A technique to determine your position by relating exterior visual references (i.e., roads, lakes, towns) to an aeronautical chart.

**Dead Reckoning:** A technique used to mathematically estimate a current or future position by using course, time, and airspeed estimates.

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**VOR Navigation:** Stands for Very-high frequency Omnidirectional Range. Involves the usage of ground-based radio stations for navigation. A pilot uses a receiver that allows him/her to navigate from one VOR station to the next.

**GPS Navigation:** Navigating using a receiver utilizing the Global Positioning System satellites.

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**Nautical Miles (nm):** The customary unit used to measure distances in aviation. Equal to 6,076' (1,852m) or about 1.151 miles.

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## Flight Training at Regal Air

The final stage focuses on improving the skills you have acquired in the previous two stages. You will review the procedures and maneuvers you have learned as well as complete the solo cross-country flight requirements. This stage concludes with the Stage 3 Check in which your procedures and maneuvers are evaluated in preparation for the End-of-Course (EOC) Check.

The End-of-Course Check is like the Practical test you will receive from the FAA Designated Pilot Examiner (DPE). This check is designed to be a dry run of the practical test to ensure you have acquired the skills and knowledge required to pass the test and earn your Private Pilot Certificate.

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**Designated Pilot Examiner (DPE):** An individual who the FAA has given the privilege of performing practical tests for the issuance of a pilot certificate.

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It is highly recommended that you purchase Jeppesen's Private Pilot Syllabus to keep track of each of the lessons in the course. This will allow you to better prepare for each lesson as you will know what material will be covered.

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**14 CFR:** Title 14 of the Code of Federal Regulations (CFR) which covers Aeronautics and Space. Also known as the **Federal Aviation Regulations (FAR)**

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## **B. Part 61 vs. Part 141**

Regal Air provides training under both 14 CFR Part 61 and 14 CFR Part 141. You will receive the same amount of training, in the same aircraft, and with the same instructors regardless of which part you train under. The difference between the programs is how strictly you will have to adhere to the training syllabus.

Training under 14 CFR Part 61 allows for more flexibility. Stage Checks can be performed by any experienced Certificated Flight Instructor (CFI) and the order of the lessons may be altered. The requirement for completion is that all training is received, the minimum amount of flight training hours is completed, and that a sufficient level of proficiency is achieved.

Training under 14 CFR Part 141 is stricter. Stage Checks and the End of Course Check may only be conducted by approved Check Instructors and the lessons must be completed in the approved order.

The stricter training syllabus required by Part 141 is offset by a lower minimum hour requirement. Part 141 training has a minimum requirement of 35 hours total time, while Part 61 requires 40 hours. This fact is of little import to most students since the average flight training time is 50-70 hours.

You should train under 14 CFR Part 141 if:

- It is required by an agency that is providing financial aid such as scholarships and grants.
- It is required by an institution of higher learning to receive credit.
- It is required because you are receiving flight training under an M-1 Student Visa (vocational training)

You should train under 14 CFR Part 61 if:

- Your situation is not one of the above.

## C. Regal Air UNICOM Frequency

You may use the Regal Air UNICOM frequency to request services while you are in flight or on the ground at Paine Field. You may use this frequency to request information from the front desk including:

- Requesting aircraft servicing such as oil, fuel, or an airplane tug.
- Requesting assistance when dealing with an emergency or malfunction in flight.
- Requesting a weather report.
- Requesting advice from a Regal Air instructor.
- Advising the front desk of a late arrival while in flight.

## Regal Air UNICOM Radio Frequency:

**123.30MHz**

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**UNICOM:** A radio station operated by a private agency for the purposes of providing services to aviation

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## D. TSA Requirements

The Transportation Security Administration (TSA) requires that U.S. citizens show proof of citizenship to the flight school prior to the start of flight training. The school is also required to keep a copy of this proof for 5 years. This proof may be one of the following:

- Current U.S. Passport (original)
- Birth Certificate (Original or Certified copy) and a current government issued photo I.D.
- Certificate of Birth Abroad and a current government issued photo I.D.
- Naturalization Certificate and a current government issued photo I.D.

You may also receive flight training towards a private pilot certificate if you are a legal permanent resident of the U.S. (green card), a temporary worker (work visa), or foreign student (student visa). Individuals in these situations are required to complete a TSA Background Check. Please contact the front desk if this is your situation to receive more information.

Non-U.S. residents who wish to take flight training towards a career will have to receive an M-1 Student Visa. Please contact the front desk for requirements.



## E. Airport Security

Regal Air must meet certain security standards due to the presence of commercial operations at Paine Field. This includes controlling who is allowed through the pedestrian gate and escorting individuals on the ramp. You must follow these rules while you are a student at Regal Air:

- **Do not** – Allow other people through the gate, they must be “buzzed in” by our front desk or other facility they are visiting
- **Do not** – Share the gate code with anyone else.
- **Lock** unattended aircraft.
- **Report** any suspicious activity to Regal Air personnel.
- **Call 911** in case of emergency, the Snohomish County Sheriff Department oversees security at Paine Field.

Students must be escorted by Regal Air personnel while on the ramp unless they have received their student pilot certificate and are performing their duties as a pilot.

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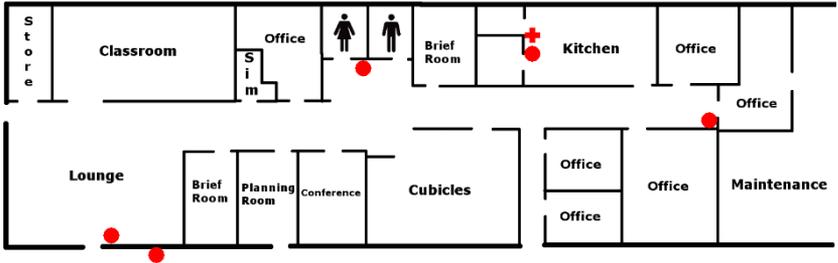
**Ramp:** The area where aircraft are parked

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## F. Emergency Equipment

Our First Aid Kit is in the kitchen. Fire extinguishers are found in the following locations:



Additional fire extinguishers are located at the fuel pumps.

Some airplanes are equipped with fire extinguishers. Your CFI will brief you on their location and use.

If it is necessary to evacuate the building:

- Assemble at the parking lot by the pedestrian gate

In case of emergency **call 911**. Firefighting services are provided by Paine Field Aircraft Rescue and Fire Fighting (ARFF).



## G. Use of Safety Belts

All occupants must wear seat belts and shoulder harnesses for the duration of a flight to avoid potential injuries and to maintain airplane control when encountering unexpected turbulence. Your CFI will brief the use of safety belts and shoulder harnesses specific to your airplane.

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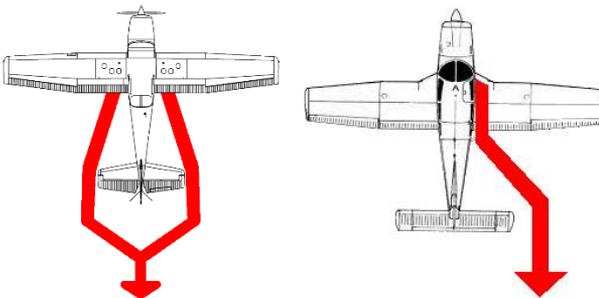
The FAA requires flight crewmembers to wear their seat belts whenever at their stations. Wearing shoulder harnesses is required during takeoff and landing unless it interferes with the crew's duties (14 CFR 91.105).

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## H. Emergency Exits

Your instructor will provide a briefing on how to open the doors and/or emergency exits of your airplane. If it is necessary to evacuate the airplane, you should take the nearest available exit then move towards the rear of the airplane.

Avoid the front of the airplane, if possible, due to the presence of the propeller and risk of fire.



## I. Use of Checklists

Airplanes are complicated vehicles which have procedures with many steps that must be performed in the correct order to operate safely. You should use the checklists provided by Regal Air as an aid to remember all the steps required to be performed for each procedure. You may use a different checklist if it is approved by your instructor.

There are two checklist usage methods:

- **Read-and-Do**  
Read and complete each step individually as it appears in the checklist
- **Do-and-Verify**  
Perform all the steps of a procedure from memory, then verify that all steps were completed by reading the checklist

Both methods are used depending on the situation. The “read-and-do” method is used when ample time is available to complete a checklist and for complex operations with many steps. The “do-and-verify” method is used during time-sensitive situations, like emergencies, or for simple and routine procedures.

A common method to memorize procedures is called a “flow check”. In this method you start on one side of the flight deck then work your way to the other side of while setting each switch or control as required.

Example flow check from the C-172 Pre-Landing Checks:



1. Fuel Selector - BOTH
2. Mixture - FULL RICH
3. Carb Heat - ON
4. Lights - AS REQUIRED
5. Primer - IN & LOCKED
6. Seat Belts - ON

## Flight Training at Regal Air

## **II. Preflight Preparation**

### A. Dispatch Procedures

All training flights are dispatched by the front desk. This includes flights in Regal Air airplanes as well as personally owned airplanes while receiving instruction from Regal Air staff.

When you arrive at Regal Air you will be asked to sign the dispatch form accepting the airplane. You will also be provided with a “Dispatch Book” containing the keys for the airplane as well as several important documents. These documents include:

- Regal Air’s checklist for that model of airplane
- Copy of the airplane manual (POH/AFM)
- Copy of POH/AFM Supplements
- Flight Log
- Maintenance Inspection Summary
- Discrepancy Sheet
- VOR Check Log

Some aircraft are not fueled to capacity due to the potential weight and balance issues. Tell the front desk if you need more fuel than is typically kept in these airplanes.



## **B. Preflight Briefing**

Your instructor will conduct a preflight briefing to ensure safe and efficient flight training operations. This briefing is usually performed in one of our briefing rooms, the classroom, or at the instructor's desk and will include the following information:

- The objectives of the lesson
- The tasks to be completed in the lesson
- A briefing on each of the tasks that will be introduced during the lesson (if needed)
- A review of the previous flight (if needed)
- A risk assessment of the flight considering the Pilots, Airplane, Environment, and External Pressures.

## **C. Fitness for Flight**

Part of the risk assessment for each flight includes assessing your own fitness for flight as well as the instructors. You should apply the FAA's IMSAFE checklist before every flight. Your instructor will provide more information on each item.

<b>I</b>	- Illness
<b>M</b>	- Medication
<b>S</b>	- Stress
<b>A</b>	- Alcohol
<b>F</b>	- Fatigue
<b>E</b>	- Eating/Emotions

## D. Flight Log

The Flight log is used to track the hours of operation of the airplane, when it was flown, and by whom. Regal Air uses the airplane's "Hobbs Time" for billing purposes. You should verify the correctness of the last entry during the preflight portion to ensure accurate billing.

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**Hobbs Time:** The Hobbs meter starts counting time after the engine has started and stops when the engine is shut down. It is typically used for billing as it provides a measurement of how long the airplane was operated.

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## Preflight Preparation

### E. Maintenance Inspections

Once it has been determined that both you and the instructor are fit for flight, you will have to verify whether the airplane is airworthy. This means you will have to ensure all required inspections have been completed, there are no unresolved maintenance issues, and all required documents are on board.

One of the documents found in the Dispatch Book is a summary of required inspections. It contains a table with the due date or “tach time” for each inspection. These inspections include:

- Annual Inspection
- 100-Hour Inspection
- Transponder Inspection
- ELT Battery Expiration Date
- Various Airworthiness Directives (AD)

**AIRCRAFT MAINTENANCE STATUS**

AIRCRAFT N: 1835Z

	NEXT DUE			
50 HOUR	<del>3110.7</del>	<del>3222.7</del>	<del>3310.3</del>	3309.7 ← Denotes Due at Tach Time
100 HOUR	<del>3160.7</del>	<del>3260.7</del>	<del>3359.7</del>	
ANNUAL	<del>9/19</del>	8/20		← Denotes Due on a certain month
IFR CHECK	<del>5/19</del>	5/21		
TRANSPONDER	<del>5/19</del>	5/21		
E.L.T.	12/2021	ELT Battery Expiration Date		
A.D. 93-05-06	3983.3			
A.D. 2011-10-09	<del>3160.7</del>	<del>3259.7</del>	<del>3262.9</del>	3359.7 ← Recurring ADs
A.D. 85-10-02	<del>3160.7</del>	<del>3259.7</del>	<del>3262.9</del>	3359.7
A.D.				
A.D.				

\*\*DUE TIMES ARE TACH TIMES\*\*

Form 240 (01-05-01)

## Preflight Preparation

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**Transponder:** An avionics device that transmits the airplane's altitude, as well as a code inputted by the pilot, to a radar facility

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**Tach Time:** The airplane's tachometer keeps track of the hours of operation of the engine, like how a car's odometer tracks the miles driven. This information is used to determine when certain inspections are due and is based on the number of engine rotations.

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**Airworthiness Directives:** Repairs, modifications, or inspections required for a specific airplane model to maintain airworthiness

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**Emergency Locator Transmitter (ELT):** A device that is activated by impact, or by the pilot, to broadcast the airplane's position in case of an accident.

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## Preflight Preparation

### F. Discrepancy Sheet

Another useful document regarding airworthiness is the “Squawk Sheet”. This document is used by pilots to communicate maintenance issues to other pilots and to our crew of Aviation Maintenance Technicians (AMT). You should always verify this document to ensure there are no known issues that may affect the safety of flight.

Aircraft Irregularity & Corrections Record	
*ONE DISCREPANCY PER BOX PLEASE*	
Discrepancy #1: <i>nose steering is not responsive                      have to use tie breaker to turn</i>	Deferred Action: <i>inspected steering system                      blocks slightly out of gear. will                      correct at 100hr</i> Deferred By: _____ Cert No: <i>A13784556</i> Date: <i>8-16-19</i>
Reported By: <i>Km.N</i> Date: <i>08/15/19</i> Office Action: _____ Airworthy? Y ___ N ___ Date: _____ Initial: _____	Corrective Action: _____ This discrepancy was deferred to the 100 hr. inspection Repaired By: _____ Cert No: _____ Date: _____
Discrepancy #2: <i>RPM drop 200-300 while                      in flight, suspect                      magenta problem</i>	Deferred Action: _____ Deferred By: _____ Cert No: _____ Date: _____ Corrective Action: <i>test flew. could                      not duplicate.</i>
Reported By: <i>San Lion</i> Date: <i>9/6/19</i> Office Action: _____ Airworthy? Y ___ N ___ Date: _____ Initial: _____	Repaired By: <i>[Signature]</i> Cert No: <i>A13784536</i> Date: <i>7-6-19</i>
Discrepancy #3: <i>Nose gear oleo strut                      not inflated.</i>	Deferred Action: _____ This discrepancy was Deferred By: <b>corrected</b> Cert No: _____ Date: _____ Corrective Action: _____
Reported By: <i>Milt House</i> Date: <i>9/29/19</i> Office Action: _____ Airworthy? Y ___ N ___ Date: _____ Initial: _____	Repaired By: <i>[Signature]</i> Cert No: <i>A12051452</i> Date: <i>9-30-19</i>

The technician's signature, number, and date indicates the aircraft has been approved for return to service.

Form 200 10-06-99

e:regal.aircraft.squawks.xls

When a maintenance issue is found, it is recorded under the “Discrepancy” column. Please make sure to write clearly and describe the issue in as much detail as possible. Regal Air staff then determine the effect on airworthiness and communicate the issue to the maintenance department. An AMT will then either correct or defer the issue, which is recorded under the “Deferred Action” or “Corrective Action” lines.

### G. Aircraft Documents

The FAA requires the following documents to be onboard of the airplane:

- Airworthiness Certificate – Which must be visible
- Registration
- Radio Station License
  - for international flights, FCC requirement
- Operating Limitation Information
  - Placards
  - Instrument Markings
  - Airplane Flight Manual (AFM) – for airplanes built after March 1, 1979
- Weight and Balance Information
- Supplements for the AFM and cockpit reference guides for certain equipment



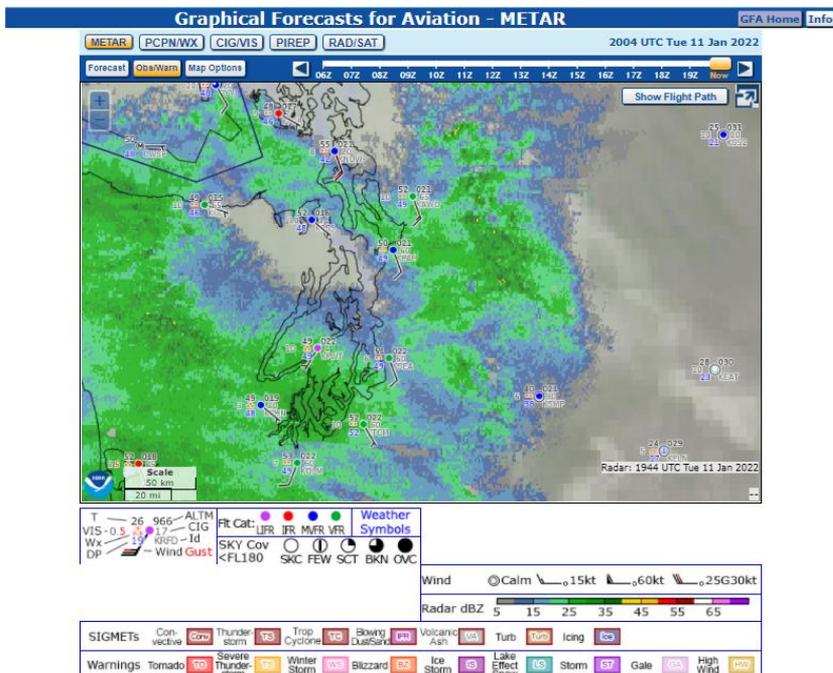
Specific document requirements and their location varies from airplane to airplane. Your instructor will brief you on their location. Typically, they will be found within a plastic bag inside a “glove compartment” or seat pocket.

## H. Weather Information

The next step in your decision making will be gathering weather information to determine if the weather conditions are safe to fly in. Your instructor will show you how to get this weather information. This information may come from a variety of providers including:

- Flight Service Station (<https://www.1800wxbrief.com/>)
- NOAA's Aviation Weather Center (<https://aviationweather.gov/>)
- Various Electronic Flight Bag (EFB) applications for mobile devices

Early in your training, the flight instructor is responsible for getting this weather information and determining if the weather conditions are safe. As you progress in the course, you learn more about weather forecasting and decision making, and you will be responsible for this information.

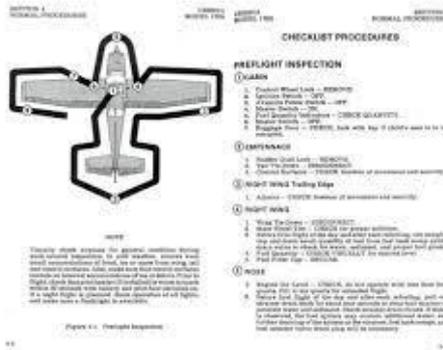


## I. Pre-Flight Inspection

You and your instructor will perform a preflight inspection of the airplane before every flight. This preflight inspection is different for each make and model airplane. Details for your specific airplane will be provided by your instructor and may be found in the airplane’s flight manual.

In the beginning, the flight instructor will perform the preflight inspection with you. As you learn more about the airplane, and gain the instructor’s trust, you will be given more responsibility regarding this inspection.

**Security reminder:** If you do not have a student pilot certificate yet, your instructor must be with you while you perform the preflight inspection.



Your preflight inspection starts with a “Fuel and Oil” check where you visually inspect the amount of fuel in the airplane and the engine oil level. The next phase is to inspect the cockpit for the required documents and to check the operation of all lights and various electrically powered instruments. Next you will perform a walk-around inspection of the airplane, checking the structure, flight controls, and other systems for proper operation and defects.

**Security reminder:** Lock all doors and keep the airplane chains secured if you must leave the airplane unattended.

## J. Flight Deck Management

The flight deck is your workspace while you are flying an airplane. Keeping the space organized will allow you to quickly find the items that you need when you need them. Here are a few recommendations to keep your flight deck organized:

### Kneeboard

- Use a kneeboard with pockets or sleeves.
- Keep paperwork you will need to use in flight on your kneeboard including checklists, navigation logs, plotters, flight computers, and mobile devices.
- Get rid of old paperwork to declutter your kneeboard.
- Bring 2-3 pens/pencils in case you lose one in flight.
- Tie your pen/pencil to your kneeboard

### Flight Bag

- Keep additional items you may have to use in flight or during your flight lesson such as your logbook, chart supplements, spare mobile devices, aviation radios, survival or emergency use items, snacks, and beverages in your flight bag.
- Remove any items that you will not use in flight such as books, notebooks, laptops, etc.
- Place the flight bag behind and to your right to be able to reach it easily.

### Pockets

- Put other necessary items in available pockets such as charts, sunglasses, and view limiting device.
- Make sure to verify the pockets before exiting the airplane so you do not leave any items.

### Other

- **Do not** put any items under your seat, they can roll forward and interfere with the pedals
- **Secure** all items so they do not move around in turbulence
- **Do not** put large items on the glareshield, the windshield is easily scratched



# **III. Normal Procedures at Regal Air**

## A. Engine Starting

The ramp area can be a busy place occupied by multiple people and with several airplanes operating at once. Please start the airplane within its designated parking spot following manufacturer's instructions and the Regal Air checklist. Additionally, take the following precautions:

- If the airplane is parked next to a building or hangar, pull the airplane away from the building and angle the airplane so that the propeller wash does not impact the building. The propeller wash can throw dirt and debris unto the building.
- Ensure there are no people near the propeller or directly behind the airplane before starting the engine.
- Turn the "Beacon" or "Anti-Collision" light "ON" before engine start to provide others with a visual warning.
- Call "Clear!" before starting the engine, this will warn people near the airplane who you may have not seen.
- Move the throttle control to a position that provides less than 1,000 RPM as soon as possible to reduce noise and avoid creating excessive propeller wash.

## B. Taxiing

Use minimum power necessary to get the airplane moving when leaving your parking spot. High power settings cause excessive noise and can throw debris at other people and airplanes around you.

Make sure to look both ways before leaving your tie down spot. Additionally, perform a brake check as you pull out to ensure the brakes work properly before you gain too much speed.

Please follow the routes depicted below when taxiing out for departure. The route to follow will vary depending on the runway you wish to use.

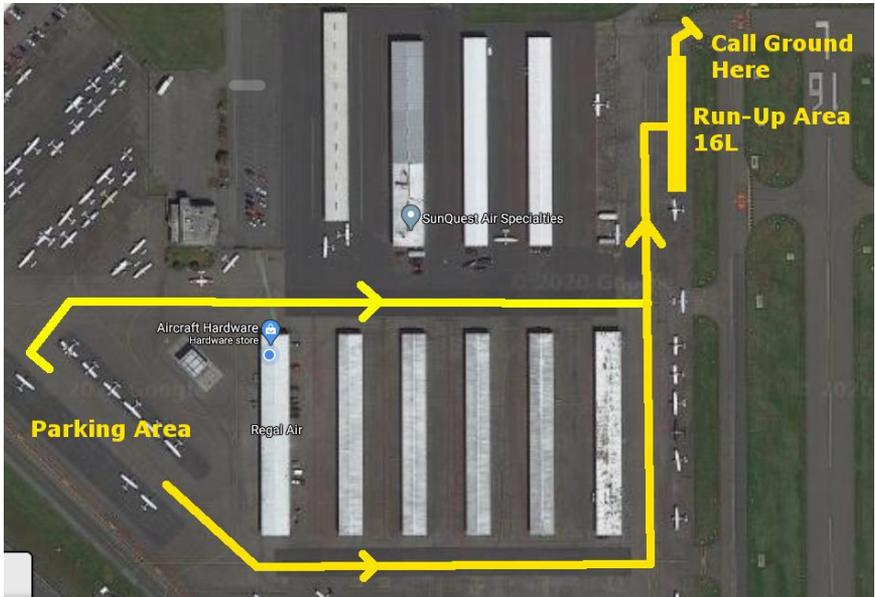
If departing on **runways 16R/34L**, the “big” runway, taxi away from your tie down and to the first intersection to the northwest side of the parking area. Then call ATC with your request.

If departing on **runway 34R**, northbound on the “small” runway, leave your parking spot and taxi to the first intersection to the southeast before calling ATC for taxi clearance to runway 34R.



## Normal Procedures at Regal Air

If departing from **runway 16L**, southbound on the “small” runway, taxi all the way to the runup area and perform the before takeoff checks without calling the ground controller. This area is all “non-movement” and ground control has no jurisdiction. After performing the before takeoff checks, taxi to the edge of the non-movement area on the north end of “G” taxiway, then call ground control to request permission to taxi to runway 16L.



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**Non-Movement Area:** An area of the airport that is not controlled by ATC. Ground Control has no authority or responsibility in this area. Includes areas for loading, unloading, parking, and moving aircraft

**Movement Area:** An area of the airport that is under the jurisdiction of ATC. Includes taxiways and runways.

---

## C. Before Takeoff Checks

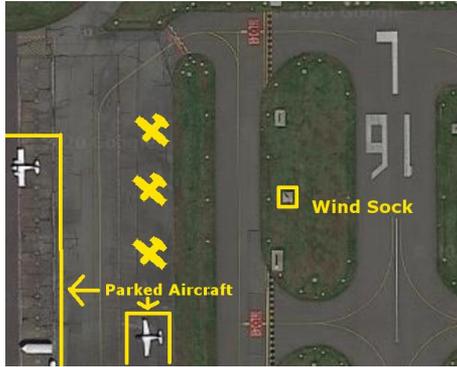
Please take the following into consideration when performing the before takeoff checks:

- There is limited space in the runup areas, and many airplanes may be trying to use them during peak hours; position yourself in a way that allows room for other airplanes to enter the runup area.
- The higher power settings used in the runup cause a strong propwash that can scatter debris behind the airplane and buffet other airplanes and windsocks. Make sure to position your airplane in a way that avoids “blasting” other airplanes, people, vehicles, and wind socks.
- Avoid performing runups on the main taxiways since you may block other aircraft.

See the diagrams on the following page for ideas on how to position the airplane. These are suggestions, you may have to position the airplane differently based on the positioning of other aircraft and the amount of traffic trying to use the runway.

# Normal Procedures at Regal Air

## Runup area 16L:

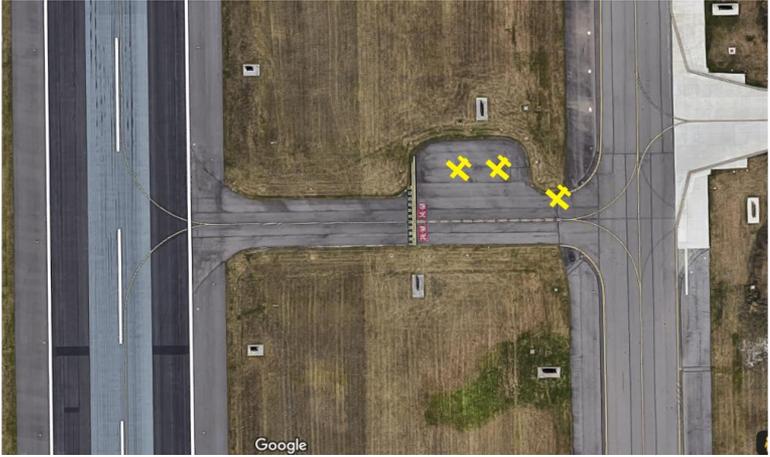


## Runup area 34R:



# Normal Procedures at Regal Air

## Runup area 16R:

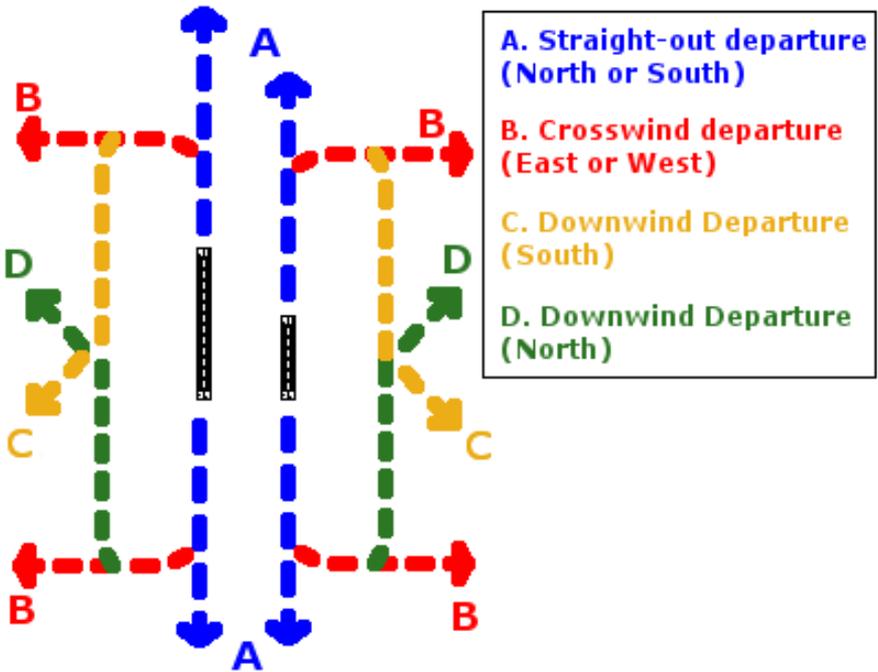


## Runup area 34L:



## D. Departing the Traffic Pattern (KPAE)

The Air Traffic Control Tower will provide instructions on how to depart the traffic pattern. The diagram below depicts common instructions at KPAE. Note that these procedures are specifically for KPAE, follow the standard pattern exit procedures found in the Aeronautical Information Manual (AIM) at other airports.

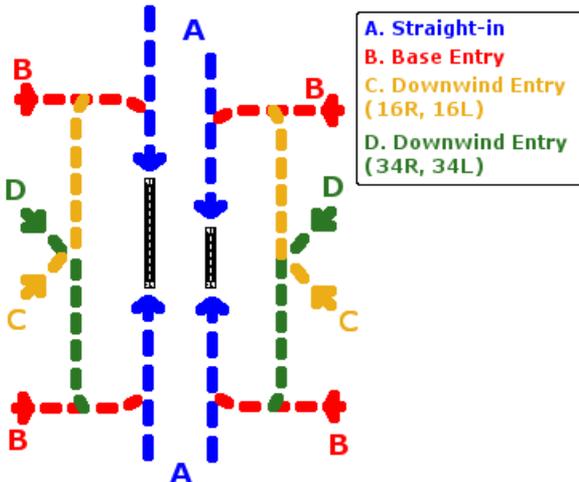


## E. Arriving at Paine Field (KPAE)

Please adhere to the following procedures when arriving at Paine Field (KPAE):

- Obtain ATIS information well before reaching 8nm from the airport
- Request entry into KPAE's class delta airspace at least 8nm away from the airport.
- If communications cannot be established due to a high traffic load, circle outside of the airspace until ATC is able to accept your request.
- Follow the tower's pattern entry instructions
- Avoid approaching straight in on 16R or 34L due to the high volume of jet traffic lining up for the big runway, unless instructed to do so by ATC.

The chart below shows a few common pattern entry instructions from ATC.

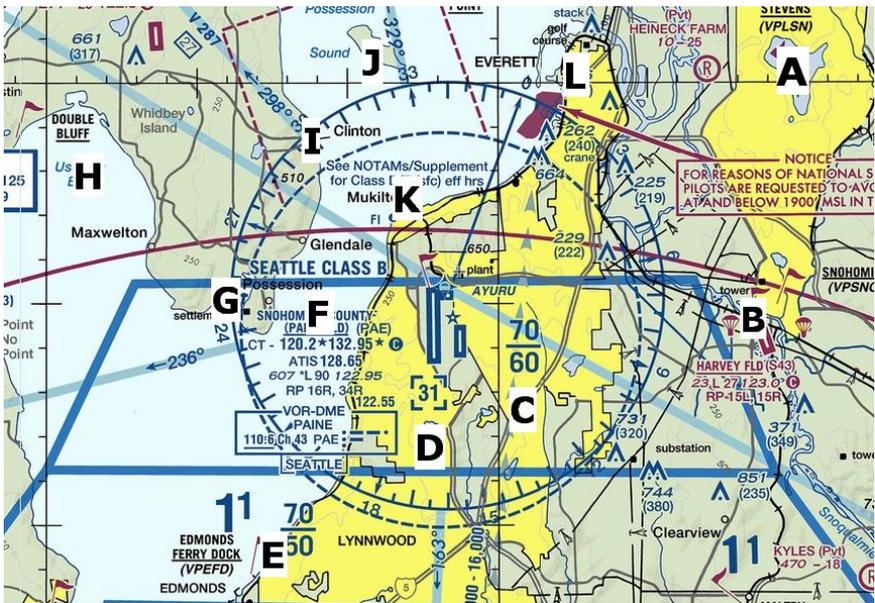


\*If ATC instructs you to perform a “straight-in entry” to a runway, you should join that runway’s final approach around 2 miles away from the airport.

## F. Reporting Points Around KPAE

The following reporting points are in common use at KPAE:

A. Lake Stevens	G. Possession Point
B. Harvey Field	H. Useless Bay (Double Bluff)
C. I-5	I. Clinton Ferry Dock
D. Water Tanks	J. Hat Island
E. Edmonds Ferry Dock	K. Mukilteo Ferry Dock
F. Mid-Channel	L. North Everett



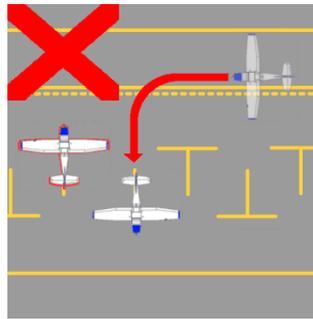
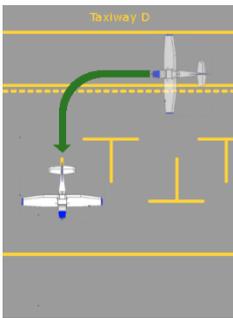
It is common to use the following points for initial reports when arriving at KPAE:

- From the **West**: Useless Bay/Double Bluff
- From the **East**: Abeam Harvey Field
- From the **South/Southwest**: Edmonds Ferry Dock
- From the **North**: North Everett

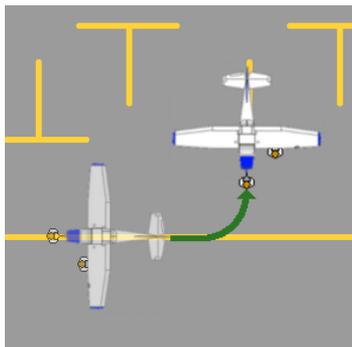
## G. Parking

Park your airplane at its designated tie-down spot. If the tie-down is occupied upon your arrival, park the airplane at one of the “transient” parking spots instead of at another airplane’s reserved slot.

You may move straight into your parking slot from the rear if there are no airplanes parked behind your spot. Note that you may have to request clearance onto “Delta” taxiway when parking straight in.



If you are unable to move straight into your slot, stop in the middle of the taxi lane at a 90° angle from your slot, then properly shut down the airplane. Once the airplane is shut down, promptly push the airplane into the tie-down spot using the towbar.



## H. Airplane Handling

Take the following precautions when pushing or pulling the airplane:

- **Always** use the towbar when pushing or pulling the airplane, applying excessive force on other parts of the airplane may cause damage
- **Do not** deflect the towbar more than 30° from center as this can put undue stress on the nose gear
- **Do not** leave the towbar attached when not in use
- Take the keys out of the ignition and place them on the glareshield to ensure the magnetos are in the OFF position
- Ensure the towbar does not contact the propeller
- If it is necessary to turn the propeller, turn it slowly and in the opposite direction of normal rotation with your fingertips to prevent kickback
- **Do not** push/pull on the following parts
  - Tail surfaces
  - Control surfaces
  - Wings
  - Propeller or propeller spinner

## I. Securing the Airplane

Ensure the following steps are completed before leaving the airplane:

- Insert the control wheel lock
- Secure your personal property
- Pick up any trash left in the airplane
- Buckle the lap belt and ensure it does not interfere with the door
  - This **does not apply** to N97AT which is equipped with seatbelt mounted airbags. The seatbelt should remain unbuckled when not in use to prevent issues with this system.
- Use shoulder harness tidy clips if supplied
- Secure the airplane with the provided chains, remove as much slack as possible
- If the winds are over 25 knots, secure the airplane with the straps
- Lock all doors



## Normal Procedures at Regal Air

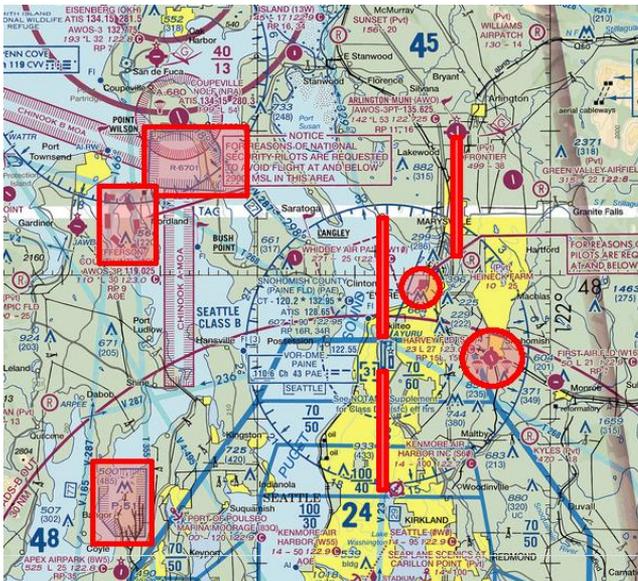


# **IV. Maneuvers**

## A. Practice Areas

There are several areas in which you should **avoid** performing any type of flight maneuvers:

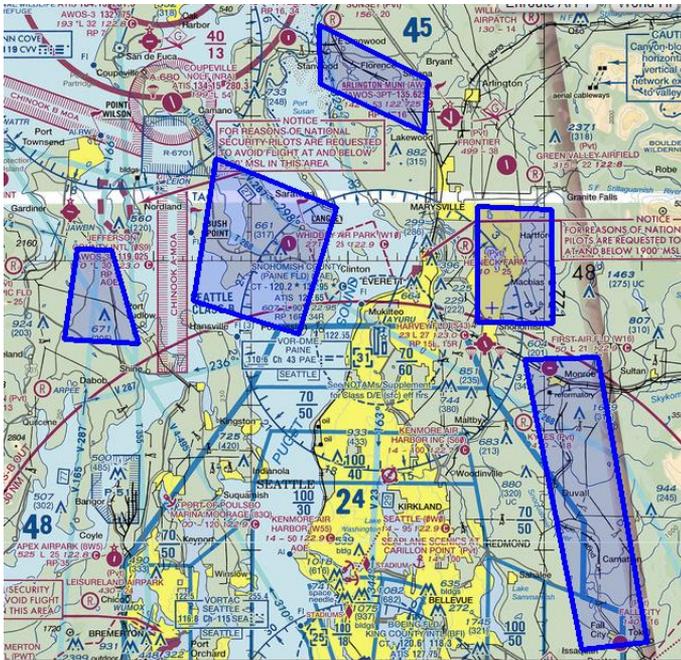
- Over Harvey Field (S43)
  - Due to parachute jump operations
- Arlington Airport (KAWO) extended runway centerline
  - To avoid interfering with aircraft performing instrument approaches into KAWO
- Approach and departure corridors for Paine Field (KPAE)
  - To avoid interfering with airline traffic and test flights into and out of KPAE
- National Security Areas:
  - Naval Station Everett
  - Indian Island Naval Magazine
- Restricted Area 6701 (when active)
- Seattle Class B Airspace
- Whidbey Island Class C Airspace



# Maneuvers

**Good** areas in which to perform maneuvers, stalls, and slow flight include:

- Snoqualmie River Valley
  - From Monroe to Carnation
- Stillaguamish River Valley
  - From Stanwood to Sylvania
- East of Lake Stevens
- Whidbey Island
- Chimacum Creek valley
  - Valleys south of Jefferson County Airport (099)



## B. Precautions

Please adhere to the following:

### Do:

- Only perform maneuvers approved by your instructor when flying solo
- Perform clearing turns before every maneuver
- Use Traffic Information Systems (TIS) when installed
- Select altitudes appropriate to the maneuver being performed
- Select an area in which to perform maneuvers that has open fields suitable for emergency landing
- Use the air-to-air frequency (122.75 MHz) to communicate your intentions
- Use exterior visual references when performing maneuvers instead of your flight instruments

### Do not:

- **Do not** perform maneuvers on your own unless approved by your instructor
- **Do not** perform ground reference maneuvers with an entry altitude less than 800' AGL
- **Do not** perform stalls or slow flight below 3,000' AGL
- **Do not** perform ground reference maneuvers above populated areas
- **Do not** loiter over a location for an extended period of time while performing ground reference maneuvers
- **Do not** assume everyone doing maneuvers is communicating on the air-to-air frequency
- **Do not** perform low altitude maneuvers over noise sensitive areas such as schools, golf courses, and other communities

# **V. Emergency Procedures**

## A. Emergency Equipment and Survival Gear

### 1. Survival Kit

Each Regal Air aircraft is equipped with a survival kit. This kit is inside a yellow waterproof container that is usually attached with hook-and-loop fasteners in the baggage compartment. It contains the following items:

First Aid Book	Accident Report form
Critical Action Cards	Aluminum foil
Water Purification Tabs	Adhesive Bandages
Butterfly Strips	Benzalkonium Wipes
100" Duct Tape	Electrolytes replace mix
Emergency Blanket	Fishing Kit
Flagging Tape	Medical Grade Gloves
Multi-Tool Knife	Needles (Sewing)
Parachute Cord	Signal Mirror
Snare Wire	Spark Fling-Tinder Kit
Splint	Whistle
Tube Tent	LED Flashlight – 9 Volt



# Emergency Procedures

## 2. Fire Extinguishers

Some airplanes at Regal Air are equipped with fire extinguishers. These are typically mounted between the two front seats. You should inspect the following before flight:

- General condition
- Safety pin is in place and secured with a plastic strip
- The pressure gauge is in the green
- It is properly fastened
- Date of last inspection



### B. Emergency Procedures

The following procedures are time critical and should be **memorized**. If time allows, you should use a checklist when resolving these emergencies:

- Engine failure or partial power loss
- Emergency approach and landing
- Fires including:
  - Engine fire in cruise
  - Engine fire while starting
  - Electrical fire
  - Wing fire
  - Cabin fire

You should be **familiar** with the following emergency procedures and malfunctions. You should consult a checklist when resolving these issues:

- Electrical failures including
  - Low voltage
  - Excessive rate of charge (high voltage)
  - Popped circuit breaker
- Loss of communications including:
  - Entering Class D airspace with transmitter and receiver failure
- Instrument system failures
- Flight into instrument meteorological conditions (IMC)
- Flight into icing conditions
- Lost procedures
- Diversion

**REMEMBER:** You can contact Regal Air while in flight by using the Regal UNICOM frequency on **123.30 MHz** if assistance is needed. Or, if on the ground you may contact us at **(425)353-9123**.

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**Instrument Meteorological Conditions (IMC):**

Weather conditions in which it is not possible to control the airplane solely by visual reference and the pilot must rely on his/her flight instruments.

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**Icing Conditions:** Weather conditions in which ice deposits onto the wing of the airplane, adversely affecting the flight characteristics of the airplane.

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# Emergency Procedures

## **VI. Flying Solo**

## A. Training and Endorsement Requirements

Before you can perform a solo flight, you must meet the following requirements:

- Hold a “Student Pilot” certificate (signed)
- Hold a third class medical or better
- Complete the required ground and flight training
  - This is usually completed near the end of the first stage
- Pass a “Pre-Solo Knowledge Test” provided by Regal Air
- Receive an endorsement from an instructor authorizing you to perform solo flights in a specific make and model airplane
  - This endorsement expires after 90 days and must be renewed periodically, until you earn your Private Pilot certificate

You will be provided with a “Pre-Solo Knowledge Test” by your flight instructor at that appropriate time in your training.

You will also have to complete certain portions of the “POH Exam” to ensure an appropriate level of knowledge about the airplane used for your solo flights.

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**Endorsement:** An entry in a pilot’s logbook signed by an instructor granting certain privileges or limitations.

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## B. FAA Limitations on Solo Flight

FAA limitations on student pilots includes the following:

- No flying with passengers
- No flying passengers or cargo for hire
- No flying for hire
- No flying in furtherance of a business
- No flying internationally
- No flying when flight or surface visibility is less than 3 statute miles
- No flying without visual reference to the ground

Additionally, all student pilots must adhere to any limitations imposed by the flight instructor providing your solo endorsement.

For the most current information, consult 14 CFR 61.81.

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**Visibility:** The distance at which you may clearly see an object. May be limited by mist, fog, smoke, haze, or other particulate matter.

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**Ceiling:** A layer of closely packed clouds that may not be possible to cross without entering one. Broken or overcast layers are considered ceilings.

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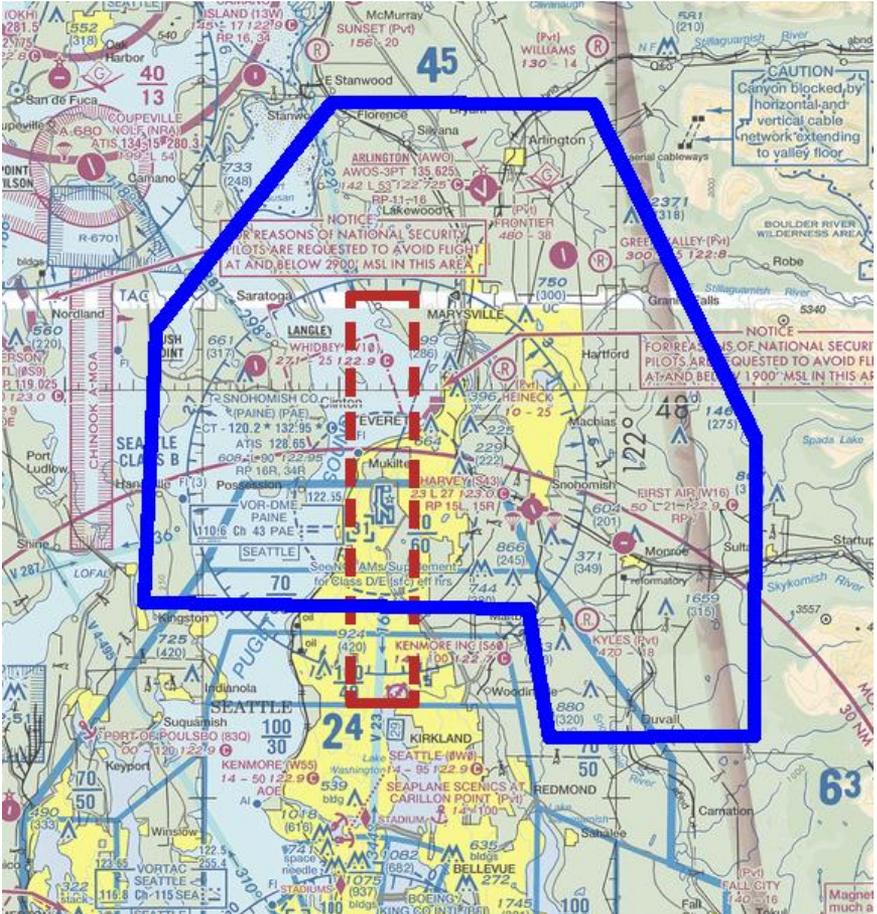
## C. Regal Air Solo Limitations Policy

Regal Air instructors will only authorize solo flights if the following minimums are met. Our instructors are authorized to establish more conservative minimums when they determine it is necessary for the safety of flight. Instructors may also refuse to authorize a flight if other risk factors not listed here are involved, if they believe it will affect the safety of flight.

- **Weather (current and forecasted)**
  - No lower than 2,500' ceiling for a local flight
  - No lower than a 3,500' ceiling for a cross-country
  - No lower than 10 statute miles of visibility (or P6SM)
  - Wind speed at the airport surface of no more than 12 knots
  - Crosswind component at airports of intended landing of no more than 7 knots
  - No tailwind component for takeoff or landing
- **Airports**
  - May only go to approved airports, listed in a separate section of this handbook.
- **Flight Recency**
  - May not fly solo if the last instructional flight was over 14 days ago
  - May not perform more than three consecutive solo flights
- **Dispatch**
  - Must be dispatched by Regal Air (regardless of whether the airplane belongs to Regal Air or is privately owned)
  - Each flight must be approved by a Regal Air instructor
- **Cross-Country Flights**
  - A Regal Air instructor must verify your cross-country flight plan and provide the appropriate endorsement before you perform a solo cross-country flight

## D. Practice Area

Students performing a local solo flight to practice maneuvers must remain within the area depicted by a solid blue line on the following map.



Avoid practicing maneuvers in the approach and departure corridor for KPAE and the areas depicted in the map found under section IV-A of this handbook.

## **E. Hazardous Terrain**

Student Pilots receiving flight training from Regal Air are prohibited from conducting solo flights into or over the following areas:

- Cascade mountain range
- Olympic mountains
- Overwater away from gliding distance from shore
- Any other areas considered mountainous terrain

## **F. Solo Dispatch Procedures**

Each solo flight must be approved by a Regal Air Flight Instructor, whether the flight is in an airplane owned by Regal Air or a personal airplane. An instructor will sign your dispatch form after ensuring you meet the FAA requirements for solo flight as well as Regal Air policies. This includes:

- You are carrying all required documents:
  - Student Pilot Certificate
  - Medical Certificate
  - Photo I.D.
  - Logbook
- You have all the required endorsements, and those endorsements are current
- The weather minimums are met for the flight
- The flight will be to approved airports (as listed in the following page)
- There are no other known factors that unnecessarily increase risk
- Students should request full fuel for solo flights, unless a lower amount is needed due to weight and balance limitations

## G. Approved Airports

Student pilots may go to the airports listed on this page, if properly endorsed by a flight instructor.

### 1. First Solo

The following airports are approved for the first solo flight:

- Snohomish County/Paine Field (KPAE)
- Arlington Municipal Airport (KAWO)
- Jefferson County International Airport (OS9)
- Bremerton National Airport (KPWT)
- Skagit Regional Airport (KBVS)

### 2. Solo Cross-Country Airports

The following airports are over 50nm away and may be used to perform the FAA required solo cross-country flights

- William R. Fairchild International (KCLM)
- Bellingham International Airport (KBLI)
- Orcas Island Airport (KORS)
- Sanderson Field (KSHN)
- Olympia Regional Airport (KOLM)
- Chehalis-Centralia Airport (KCLS)
- Bowerman Airport (KHQM)
- Kelso Southwest Washington Regional Airport (KKLS)
- Astoria Regional Airport (KAST)
- Hillsboro Airport (KHIO)

### 3. Other Airports

These airports do not meet the cross-country requirement, but may be used to practice landings

- Renton Municipal Airport (KRNT)
- Auburn Municipal Airport (S50)
- Friday Harbor Airport (KFHR)
- Tacoma Narrows Airport (KTIW)
- Norman Grier Field (S36)

# **VII. Privately Owned Airplanes**

## A. Requirements

Regal Air may be able provide training in your own airplane. This service will depend on the specific make and model of the airplane and the availability of instructors with experience in the same or similar type of airplane.

To receive training in your own airplane you must:

- Ensure the airplane is airworthy
  - Must show proof of the airworthiness of the airplane by providing the original maintenance logs, including:
    - Annual inspection
    - Recurrent AD compliance
    - Transponder check
    - ELT Inspection and battery expiration date
  - Must provide the required aircraft documents:
    - Airworthiness Certificate
    - Registration
    - POH/AFM (if required)
    - Latest weight and balance information
    - Flight Manual Supplements
    - Required placards
- Must have airplane owner's insurance that will cover flight training and understand their requirements to provide coverage.
  - Must show proof of insurance to Regal Air

Regal Air will keep copies of the documents used to prove airworthiness and insurance coverage.

## **B. Solo Requirements**

Students flying their own airplanes will adhere to all Regal Air policies as shown in the “Flying Solo” section of this handbook. These include the minimum weather limitations, practice areas, approved airports, endorsements, testing, the requirement for each flight to be approved by a Regal Air instructor, and any other limitations imposed by Regal Air or its Flight Instructors.

## Privately Owned Airplanes

# **Appendix A: Airworthiness Checklist**

## AIRWORTHINESS REQUIREMENTS (14 CFR 91.7)

<b>Documents (14 CFR 91.9, 91.203)</b>	
<u>A</u> irworthiness Document	No expiration, as long properly maintained
<u>R</u> egistration	Expires every 3 years
<u>R</u> adio Station License*	Only for international flight
<u>O</u> perating Limitations \ AFM	After 1979 requires AFM
<u>W</u> eight and Balance	No expiration, as long as nothing changes
<u>S</u> upplements & Guides	AFM Supplements and Guides
<b>Inspections (14 CFR 91. 403, 91.409, 91.411, 91.413, 91.171, 91.207)</b>	
<u>A</u> irworthiness Directives	Verify AD Compliance
<u>A</u> nnual Inspection	12 Months, performed by an IA
<u>V</u> OR Check	30 Days, performed by the pilot (IFR only)
<u>100</u> -Hour Inspection	For hire & instr. for hire, performed by AMT
<u>A</u> ltimeter \ Pitot Static Check	24 Months (IFR only)
<u>T</u> ransponder Check	24 Months
<u>E</u> LT Inspection	12 Months
<b>ELT Battery Change or Recharge</b>	50% of battery useful shelf-life
	1 hour of cumulative use
<b>Day VFR Minimum Equipment (14 CFR 91.205, 91.207, 91.209)</b>	
<u>A</u> nti-collision Light*	*After 1996
<u>T</u> achometer	
<u>O</u> il Temperature Gauge	
<u>M</u> agnetic Compass	
<u>A</u> ltimeter	
<u>T</u> emperature Gauge*	*For each liquid cooled engine
<u>O</u> il Pressure Gauge	
<u>F</u> uel Gauges	
<u>F</u> loatation Devices*	*For hire beyond gliding distance of shore
<u>L</u> anding Gear Pos. Indicators*	*If equipped with retractable landing gear
<u>A</u> irspeed Indicator	
<u>M</u> anifold Pressure Gauge*	*For each altitude engine
<u>E</u> LT	
<u>S</u> eat Belts \ Shoulder Harness	*See 91.205(b)(14) for details
<b>Night Minimum Equipment</b>	<b>IFR Minimum equipment</b>
<u>F</u> uses (one kit or 3 of each type)	<u>G</u> enerator or Alternator
<u>L</u> anding Light (for hire)	<u>R</u> adio and Navigation Equipment (as req.)
<u>A</u> nti-Collision Light	<u>A</u> ttitude indicator
<u>P</u> osition Lights	<u>B</u> all
<u>S</u> ource of Electrical Power	<u>C</u> lock with sweep second hand
	<u>A</u> ltimeter (Sensitive)
	<u>R</u> ate of Turn Indicator
	<u>D</u> irectional Gyro

<b>SPECIAL EQUIPMENT REQUIREMENTS</b>	
<b>Transponder and ADS-B Out Requirements (14 CFR 91.215 &amp; 91.225)</b>	<b>2-Way Radio Requirements [14 CFR 91.129, .130, .131, .135, .205(d)]</b>
Class A, B, and C airspace	Class A, B, C, and D
Within 30nm of the primary airport of a Class B airspace	Instrument Flight Rules
Above the lateral boundaries of Class C airspace	
Above 10,000' MSL (If Above 2,500' AGL)	
<b>INOPERATIVE EQUIPMENT (14 CFR 91.213)</b>	
<b>If equipped with a Minimum Equipment List (MEL)</b>	
Follow MEL Instructions	
<b>If not equipped with MEL [14 CFR 91.213(d)]</b>	
Check 14 CFR 91.205	
Check POH\AFM Equipment List	
Check Type Certificate Data Sheet (TCDS)	
Check the Kinds of Operations Equipment List (KOEL)	
Evaluate the effect of inoperative equipment on the safety of flight.	
<b>Inoperative Equipment Procedures</b>	
<b>*At Regal Air: Contact the Front Desk about the discrepancy</b>	
1. - Remove Equipment (may require an AMT) - Removal may require additional tools and expertise - This requires maintenance or preventive maintenance and must be logged properly in maintenance logbook	
2. - Deactivate Equipment (may require an AMT) - Deactivation may require additional tools and expertise - If deactivation involves maintenance or preventive maintenance: must be logged properly in the maintenance logbook	
3. Placard the equipment "Inoperative" or "Inop"	
4. Annotate the discrepancy (ex. Squawk Sheet)	
<b>*At Regal Air: Contact the Front Desk about the discrepancy</b>	



# **Appendix B: Pilot Qualifications Checklist**

## PILOT QUALIFICATIONS

<b>Fitness for Flight (14 CFR 91.17 and AIM 8-1-1)</b>	
<b>Illness</b>	Check for sickness or health conditions
<b>Medicine</b>	Check with Aviation Medical Examiner
<b>Stress</b>	Avoid daily life stresses
<b>Alcohol</b>	8 Hours “Bottle to Throttle”, no more than 0.04% BAC
<b>Fatigue</b>	Rest before a flight
<b>Eating</b>	Ensure adequate nutrition and hydration
<b>Currency (14 CFR 61.57)</b>	
<b>Day</b>	At least 3 takeoffs and landings in the last 90 days in the same Category and Class of aircraft
<b>Night</b>	At least 3 takeoffs and full stop landings in the last 90 days, 1 hour after sunset and 1 hour before sunrise in same Category and Class of aircraft
<b>Tailwheel</b>	At least 3 takeoffs and landings to a full stop in the last 90 days in a tailwheel airplane
<b>Instrument</b>	<i>Using Aircraft, Flight Simulator, FTD, or ATD:</i> 6 Approaches, a holding pattern, tracking and intercepting courses within the preceding 6 months
	<i>If less than 6 months since last current:</i> Achieve currency while VFR with safety pilot or CFII
	<i>If more than 6 months since last current:</i> Instrument Proficiency Check
<b>Documents (14 CFR 61.3)</b>	
Government Issued Photo Identification	
Pilot Certificate	
Medical Certificate or BasicMed	
<b>Additional Endorsement Requirements (14 CFR 61.31)</b>	
<b>Tailwheel</b>	To fly airplanes equipped with a tailwheel
<b>High Performance</b>	To fly airplanes with over 200HP
<b>Complex</b>	To fly airplanes with retractable landing gear, constant-speed propeller and flaps
<b>High Altitude</b>	To fly pressurized airplanes with a maximum service ceiling of 25,000 or higher

<b>Additional Type Ratings (14 CFR 61.31)</b>	
<b>Aircraft requiring additional type ratings</b>	Large Aircraft (>12,500lb.)
	Turbojet Powered Aircraft
	Others specified by the FAA
<b>Medical Requirements (14 CFR 61.23)</b>	
<b>For Airline Transport Pilot:</b>	<i>First Class (over 40yo):</i> 6 Months
	<i>First Class (under 40yo):</i> 12 Months
<b>For Commercial Pilot:</b>	<i>First or Second Class:</i> 12 Months
<b>For Private Pilot:</b>	<i>First, Second, or Third Class (over 40yo):</i> 24 Months
	<i>First, Second, or Third Class (under 40yo):</i> 60 Months
<b>Basic Med (PPL):</b>	<i>Physical Exam:</i> 48 Months:
	<i>Online Medical Course:</i> 24 Months
<b>Basic Med Aircraft Limitations (14 CFR 61.113(i))</b>	
<b>Weight:</b>	No more than 6,000 lb. Max TO Weight
<b>Seats:</b>	Not authorized for more than 6 seats
<b>Passengers:</b>	No more than 5 passengers
<b>Operational Restrictions:</b>	May not fly above 18,000' MSL May not fly in excess of 250 knots May not operate outside of US, unless approved by the country over which you are flying
<b>Proficiency</b>	
Am I familiar with this aircraft type?	
Am I familiar with the avionics?	
Am I proficient in the current weather conditions?	
Am I proficient in this type of operation?	
Am I proficient at the types of procedures that are planned?	