

Regal Air Flight Training Operations Manual 2023

For All Flight Training Programs

(Parts 61 and 141)



Copyright

Regal Air Flight Training Operations Manual 2023

www.regalair.com

Copyright © 2023 Regal Air

All rights reserved

Preface

Welcome to flight training at Regal Air!

This handbook contains valuable information for pilots training 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 contained in these pages are meant to supplement information provided by the Federal Aviation Administration (FAA) 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.

Table of Contents

I.	Flight Training at Regal Air.....	9
A.	The Private Pilot Flight Training Program	10
B.	The Instrument Rating Flight Training Program	12
D.	The Commercial Pilot Certificate Flight Training Program	13
E.	The Multi-Engine Additional Class Rating Program	14
G.	The Flight Instructor Training Programs	15
I.	Part 61 vs. Part 141	16
J.	Use of Aviation Training Devices	17
K.	Regal Air UNICOM Frequency	18
L.	TSA Requirements.....	19
M.	Airport Security	20
N.	Emergency Equipment.....	21
O.	Use of Safety Belts	22
P.	Emergency Exits	22
Q.	Use of Checklists.....	23
II.	Preflight Preparation	24
A.	Dispatch Procedures	25
B.	Preflight Briefing	26
C.	Fitness for Flight.....	26
D.	Flight Log.....	27
E.	Maintenance Inspections.....	27
F.	Discrepancy Sheet.....	29

G.	Aircraft Documents	30
H.	Weather Information	31
I.	Pre-Flight Inspection	32
J.	Flight Deck Management	33
III.	Normal Procedures at Regal Air	34
A.	Engine Starting	35
B.	Taxiing	35
C.	Before Takeoff Checks	37
D.	Departing the Traffic Pattern (KPAE)	39
E.	Arriving at Paine Field (KPAE)	40
F.	Reporting Points Around KPAE	41
G.	Parking	42
H.	Airplane Handling	43
I.	Securing the Airplane	44
IV.	Maneuvers	47
A.	Practice Areas	48
B.	Precautions	50
V.	IFR Procedures	51
A.	IFR Flight Plans	52
B.	Requesting Your Clearance	53
C.	Approach Profile -Lateral Navigation Only (C172)	54
D.	Approach with Vertical Guidance Profile (C172)	55
E.	Approach Profile – Lateral Navigation Only (PA34)	56

F.	Approach Profile – with Vertical Guidance (PA34)	57
G.	Circle to Land – Inoperative Engine (PA34)	58
VI.	Emergency Procedures	59
A.	Emergency Equipment and Survival Gear	60
B.	Emergency Procedures (All Aircraft).....	62
C.	Emergency Procedures (Multi-Engine Aircraft).....	64
D.	Loss of Communications	65
E.	Equipment Failures Under IFR	66
VII.	Flying Solo – Student Pilots.....	67
A.	Training and Endorsement Requirements.....	68
B.	FAA Limitations on Solo Flight	69
C.	Regal Air Solo Limitations Policy.....	70
D.	Practice Area	71
E.	Hazardous Terrain.....	72
F.	Solo Dispatch Procedures	72
G.	Approved Airports.....	73
VIII.	Privately Owned Airplanes.....	74
A.	Requirements.....	75
B.	Solo Requirements – Student Pilots	76

Table of Figures

Figure 1 Logo of the TSA	19
Figure 2 Logo of the Snohomish County Sheriff	20
Figure 3 Location of Fire Extinguishers	21
Figure 4 Logo of Paine Field's ARFF	21
Figure 5 Airplane Emergency Exits.....	22
Figure 6 Example flow check from the C-172 Pre-Landing Checks.....	23
Figure 7 Dispatch Book	25
Figure 8 Aircraft Maintenance Status	28
Figure 9 Aircraft Squawk Sheet.....	29
Figure 10 Aircraft Documents.....	30
Figure 11 Aviationweather.gov GFA Tool	31
Figure 12 Cessna Preflight.....	32
Figure 13 16R, 34L, and 34R Radio Call Locations	36
Figure 14 16L Runup Area and Radio Call Location	36
Figure 15 Runup Area for 16L	38
Figure 16 Runup Area 34R	38
Figure 17 Runup Area for 16R.....	38
Figure 18 Runup Area 34L.....	38
Figure 19 KPAE Traffic Pattern Departures.....	39
Figure 20 KPAE Traffic Pattern Arrivals.....	40
Figure 21 KPAE VFR Reporting Points	41
Figure 22 Straight-In Parking	42

Figure 23 Do not park like this	42
Figure 24 Backing into tiedown spot	42
Figure 25 Chain Attachment for Cessna	45
Figure 26 Chain Attachment for Piper	45
Figure 27 Securing Seat Belts.....	46
Figure 28 Piper Seat Belt Lock and Cover	46
Figure 29 Areas to Avoid.....	48
Figure 30 Practice Areas	49
Figure 31 Lateral NAV Approach Profile (C172).....	54
Figure 32 Vertical NAV Approach Profile (C172)	55
Figure 33 Lateral NAV Approach Profile (PA34)	56
Figure 34 Vertical NAV Approach Profile (PA34)	57
Figure 35 Survival Kit.....	60
Figure 36 Fire Extinguisher	61
Figure 37 Solo Practice Area	71

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 of flight, 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.

Solo Flight: Flight time in which a student pilot is the sole occupant of the aircraft.

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 techniques and procedures such as taking off and landing at airports with short or unpaved 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.

Cross-Country Flight: A flight to another airport. For certification purposes, these flights must include a landing at an airport more than 50nm from the original point of departure.

Pilotage: A navigation technique in which your position is determined by relating exterior visual references to an aeronautical chart (i.e., roads, lakes, towns).

Flight Training at Regal Air

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

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.

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

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 and 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.

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

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.

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

B. The Instrument Rating Flight Training Program

Flight Instructors at Regal Air adhere to the Jeppesen Instrument/Commercial 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 that you meet the Airman Certification Standards (ACS) for the FAA Instrument Rating - Airplane Practical Test.

The first stage focuses on the fundamentals of flight and on the operation of navigation equipment under simulated instrument conditions, that is, while wearing a “view limiting device”. You will practice controlling the airplane via instrument reference using both a full instrument panel and simulated instrument failures. You will also practice using the instrument navigation equipment installed in your airplane. This stage concludes in the “Stage 1 Check” which will test your fundamentals and your ability to navigate by instrument reference.

The second stage consists of training in instrument procedures. You will practice performing departure procedures, holding patterns, and several types of approach procedures. By the end of this stage, you will be proficient at flying instrument procedures using both full- and partial-panel instrument reference.

In the final stage of the training program, you will practice performing IFR Cross-Country flights. You will have to perform one “long” cross-country flight of at least 250nm total distance under simulated or actual instrument conditions. You will also polish the skills you acquired in the previous two stages in preparation for the practical test.

The training program concludes with the End-of-Course Check. This flight 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 Instrument Rating.

D. The Commercial Pilot Certificate Flight Training Program

Flight Instructors at Regal Air adhere to the Jeppesen Instrument/Commercial 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 Commercial Pilot Certificate with an Airplane Single-Engine Land Rating Practical Test.

The first stage focuses on meeting the cross-country aeronautical experience requirements and receiving training in night operations. You will review VFR day and night cross-country procedures, perform your “long” solo cross-country flight as well as meet certain dual cross-country requirements. This stage concludes with a Stage Check in which you demonstrate that your cross-country procedures meet ACS.

The second stage consists of introducing the maneuvers required by the Commercial Pilot practical test and receiving training in the operation of a Technically Advanced Airplane (TAA). You will be introduced to chandelles, lazy-8s, eights-on-pylons, power-off 180° landings and other maneuvers. You will also learn how to operate a TAA in both VFR and IFR.

Technically Advanced Airplane (TAA): An airplane equipped with an electronic Primary Flight Display (PFD), a Multi-Function Display (MFD) with a moving-map using GPS navigation, and an autopilot that integrates with these systems. Commercial pilots are required to receive 10 hours of training in TAA. 14 CFR 61.129(j)

In the final stage you will polish the skills acquired during the first two stages. You will practice maneuvers, normal and emergency procedures, cross-country procedures, and flying under IFR. This stage concludes with a Stage 3 Check and the End of Course Check to verify your proficiency at performing the maneuvers required by the Commercial Pilot certificate.

E. The Multi-Engine Additional Class Rating Program

Flight Instructors at Regal Air adhere to the Jeppesen Instrument/Commercial Pilot Syllabus which includes the multi-engine training. The training provided to pilots with a Private Pilot Certificate, or a Commercial Pilot certificate is the same; but their proficiency is evaluated according to their respective ACS.

If the pilot holds an instrument rating, the multi-engine training must include training on instrument procedures with a failed engine and the pilot must demonstrate an approach with an inoperative engine during the practical test. We recommend that students who are not proficient at IFR operations review these procedures in a single-engine airplane or AATD before attempting them in the multi-engine airplane. This requirement cannot be waived.

The multi-engine program consists of one stage of training that begins with aircraft familiarization. Once you can perform basic maneuvers and normal procedures in the airplane, you will proceed to receive emergency training with an emphasis in the response to engine failures in various situations. Finally, you will complete your training by performing simulated engine inoperative IFR procedures. To conclude your training, you will take an “End of Course Check” to confirm you meet the Airman Certification Standards (ACS) for the FAA Private or Commercial Pilot – Airplane multi-Engine Land (AMEL) Practical Test.

G. The Flight Instructor Training Programs

Regal Air provides training for the following Flight Instructor (CFI) certificates and ratings:

- Flight Instructor – Airplane Single-Engine (CFI)
- Additional CFI Rating – Instrument – Airplane (CFII)
- Additional CFI Rating – Airplane Multi-Engine (MEI)

Each of the Flight Instructor training programs follows a two-stage sequence as found in the Jeppesen Flight Instructor Syllabus. During the first stage you will practice flying the airplane from the right seat while analyzing all the procedures and maneuvers required by the CFI Practical Test Standards (PTS). If applying for an initial CFI certificate you will also study for the Fundamentals of Instruction (FOI) and the Flight Instructor Airplane (FIA) aeronautical knowledge tests. If you receive training for the CFII certificate, you will study for the Flight Instructor – Instrument (FII) knowledge test.

The second stage gives you an opportunity to practice teaching and rehearsing your presentations. During flight training sessions you will practice performing the required tasks to standard while explaining their performance. During the ground sessions you will rehearse the lessons you must give your students according to the PTS.

The training concludes with an End of Course Check (EOC) conducted by one of our most experienced flight instructors. This check is an opportunity to rehearse for the practical test and help you find and correct any weaknesses.

I. 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 quality 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 and the minimum number of hours required to complete the programs.

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 the required training is received, the minimum number of flight training hours is completed, and that a sufficient level of proficiency is achieved.

Training under 14 CFR Part 141 is more structured. Stage Checks and the End of Course Check must be conducted by approved Check Instructors and the lessons must be completed in the order specified in the syllabus for the certificate or rating.

You should train under 14 CFR Part 141 if:

- It is required by an agency 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.

J. Use of Aviation Training Devices

1. Advanced Aviation Training Devices (AATD)

Regal Air has an Advanced Aviation Training Device (AATD) available for training. The AATD is a valuable training tool that allows the instructor to introduce new concepts and practice in a safe and stress-free environment. Using the AATD may help in reducing the costs of your flight training. The FAA has a limit on how much AATD time can be credited towards the certificate requirements. You can train in the AATD for more than this, but this is the maximum that may count towards your training requirements:

- Private Pilot
 - Part 61: 2.5 hours*
- *Note that the 3.0 hours of training in flight under instrument conditions must be completed in the airplane, not in an AATD.
- Instrument Rating
 - Part 61 – 20 hours
 - Part 141 – 14 hours
 - Commercial Pilot
 - Part 61 - 50 hours

2. Personal Computer-Based Aviation Training Devices (PC-ATD)

Using a personal training device, such as a PC-based flight simulator, may prove useful during training. A few guidelines to follow when using a personal device:

- Do not log the flight time. Time spent in a personal, noncertified device does not count as flight time nor training time.
- Practice procedures on the device after you have been introduced to the procedures by your instructor. This will help prevent you from creating bad habits which can interfere with your training.
- Use airplanes that are the same model used for training and are equipped similarly.
- Talk to your instructor about using your own flight simulator for training.

K. 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:

123.30 MHz

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

L. 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 for the following certificates and ratings:

- Private Pilot Certificate
- Instrument Rating
- Multi-Engine Rating

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 certain types of flight training 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.



Figure 1 Logo of the TSA

M. 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.

Ramp: The area where aircraft are parked



Figure 2 Logo of the Snohomish County Sheriff

N. Emergency Equipment

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

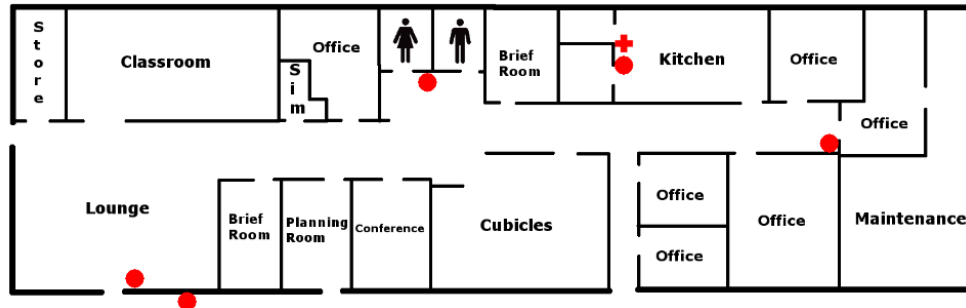


Figure 3 Location of Fire Extinguishers

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).



Figure 4 Logo of Paine Field's ARFF

O. 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.

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).

P. 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.

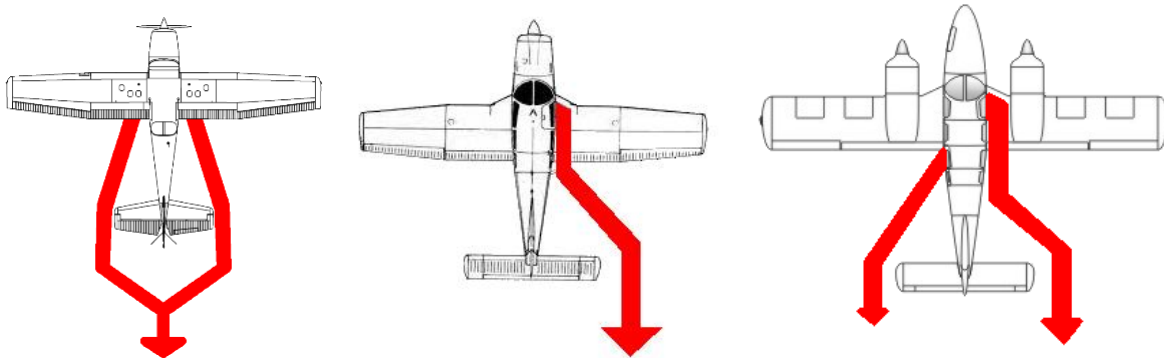


Figure 5 Airplane Emergency Exits

Q. 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 during different situations. 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 while setting each switch or control as required.



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

Figure 6 Example flow check from the C-172 Pre-Landing Checks

II. Preflight Preparation

Preflight Preparation

A. Dispatch Procedures

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

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 potential weight and balance issues. Tell the front desk if you need more fuel than is typically kept in these airplanes.

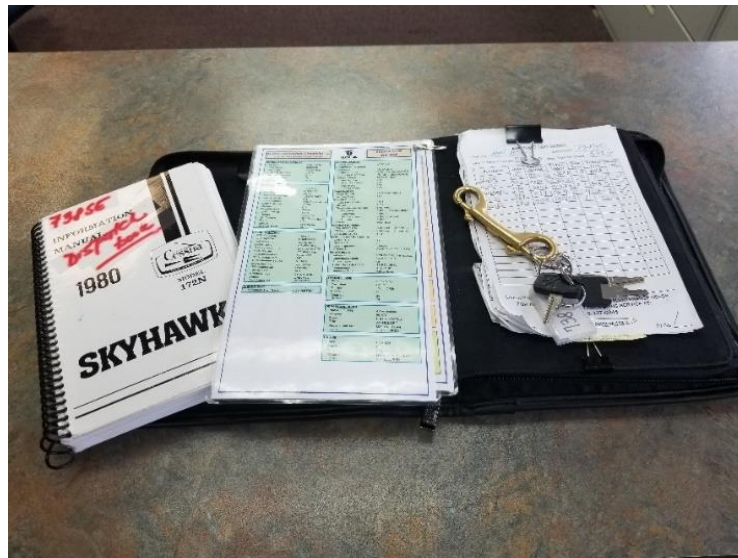


Figure 7 Dispatch Book

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 student and instructor, airplane, environment, and external pressures.

C. Fitness for Flight

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

I	- Illness
M	- Medication
S	- Stress
A	- Alcohol
F	- Fatigue
E	- 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.

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 operating.

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
- Altimeter and Pitot-static system check (IFR Check)
- Transponder Inspection
- ELT Battery Expiration Date
- Various Airworthiness Directives (AD)

Preflight Preparation

AIRCRAFT MAINTENANCE STATUS

AIRCRAFT N: 1835Z

NEXT DUE							
50 HOUR	3110.7	3212.7	3310.7	3309.7	← Denotes Due at Tach Time		
100 HOUR	3160.7	3260.7	3359.7				
ANNUAL	9/19	8/20	← Denotes Due on a certain month				
IFR CHECK	5/19	5/21					
TRANSPONDER	5/19	5/21					
E.L.T.	12/2021	ELT Battery Expiration Date					
A.D. 93-05-06	3983.3						
A.D. 2011-10-09	3160.7	3259.7	3262.9	3359.7	← Recurring ADs		
A.D. 85-10-02	3160.7	3259.7	3262.9	3359.7			
A.D.							
A.D.							

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

Form 240 (01-05-01)

Figure 8 Aircraft Maintenance Status

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

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.

Airworthiness Directives: Repairs, modifications, or inspections required for a specific airplane model to maintain airworthiness. Like a “recall.”

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

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.

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.

Aircraft Irregularity & Corrections Record N 174903

ONE DISCREPANCY PER BOX PLEASE

Discrepancy #1: nose steering is not responsive have to use the brake to turn	Deferred Action: inspected steering system shows slightly out of spec. will address at 100hr Deferred By: [Signature] Cert No. AP3784556 Date: 8-16-19
Reported By: Km. N Date: 08/15/19 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: RPM drop 200-300 while in flight suspect magneto problem	Deferred Action: Deferred By: Cert No. Date: Corrective Action: test flew. could not duplicate.
Reported By: Sam Lien Date: 9/6/19 Office Action: Airworthy? Y_N Date: Initial:	Repaired By: [Signature] Cert No. AP3784556 Date: 9-6-19
Discrepancy #3: nose gear oleo strut not inflated	Deferred Action: This discrepancy was corrected Deferred By: Cert No. Date:
Reported By: Matt House Date: 9/29/19 Office Action: Airworthy? Y_N Date: Initial:	Corrective Action: Replaced o-rings. Serviced strut. Repaired By: [Signature] Cert No. AP2651452 Date: 9-30-19

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

Figure 9 Aircraft Squawk Sheet

Preflight Preparation

G. Aircraft Documents

The FAA requires the following documents to be onboard 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



Figure 10 Aircraft Documents

Specific document requirements and their location vary 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.

NOTE: These documents must always remain within the airplane, do not remove from the airplane

Preflight Preparation

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 will learn more about weather forecasting and decision making while taking on more of the responsibility.

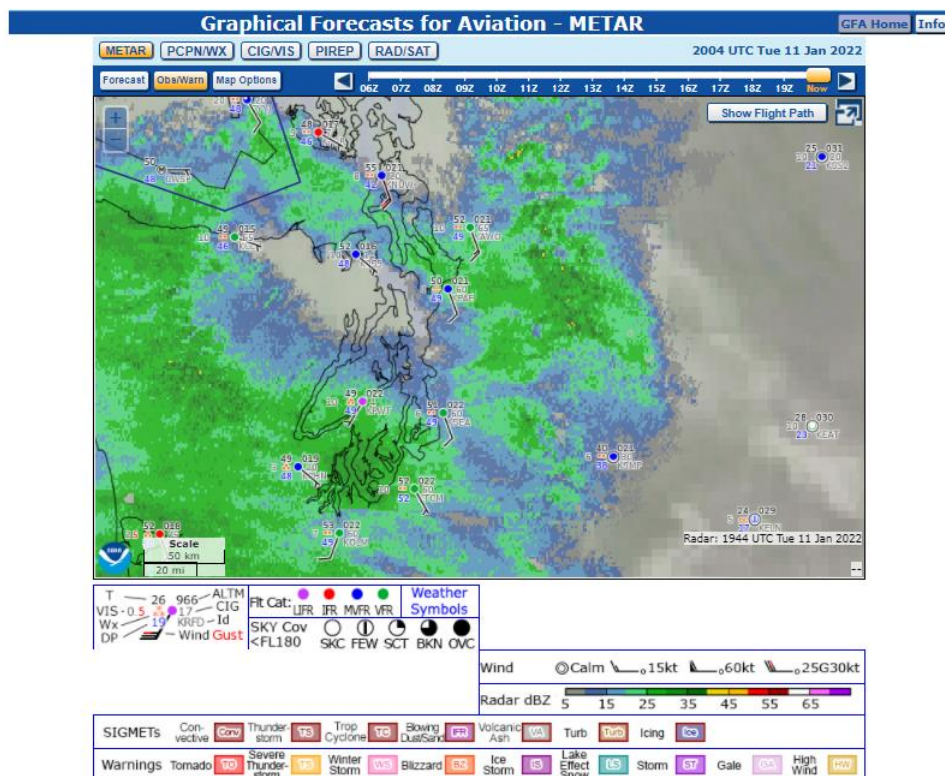


Figure 11 Aviationweather.gov GFA Tool

If planning to use a commercial weather information source, discuss it with your instructor to ensure it provides all the information you need.

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.
- Verify the airplane's 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 bulky items on the glareshield, the windshield is easily scratched.

III. Normal Procedures at Regal Air

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 the 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 onto 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.
- After the engine starts, 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 the 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; as well as cause additional wear on a cold engine.

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.

Normal Procedures at Regal Air

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.

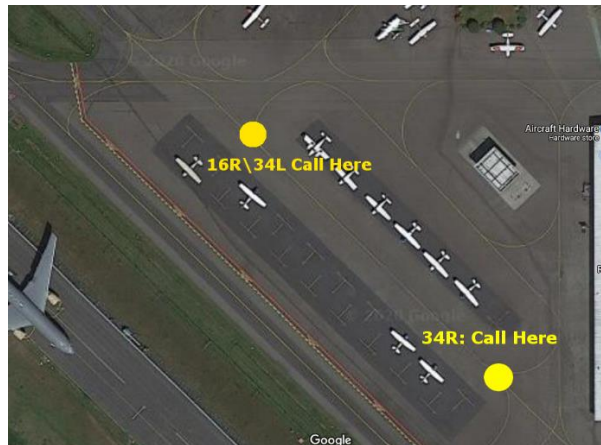


Figure 13 16R, 34L, and 34R Radio Call Locations

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 “nonmovement” and ground control has no authority. 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.



Figure 14 16L Runup Area and Radio Call Location

Normal Procedures at Regal Air

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 authority 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 windsocks.
- 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.

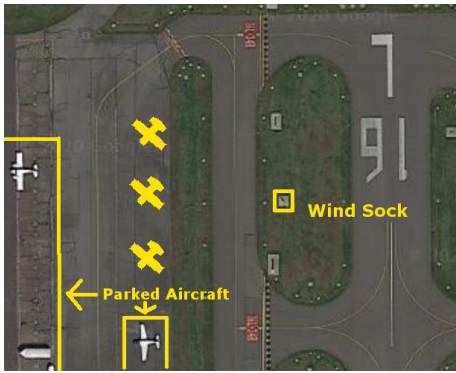


Figure 15 Runup Area for 16L

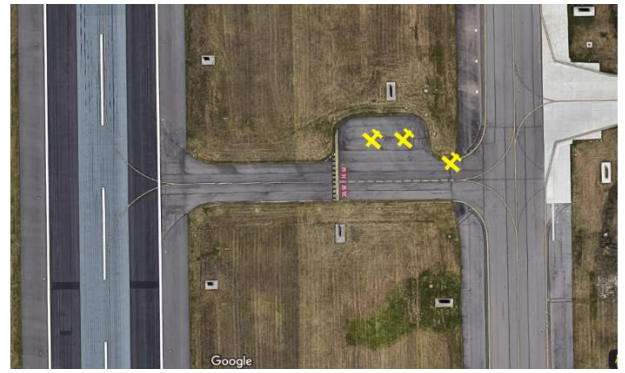


Figure 17 Runup Area for 16R



Figure 16 Runup Area 34R

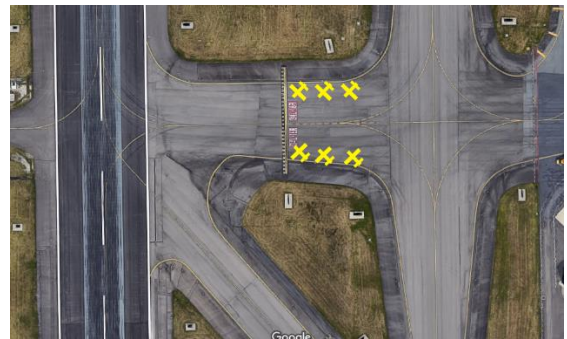


Figure 18 Runup Area 34L

D. Departing the Traffic Pattern (KPAE)

The Air Traffic Control Tower (ATCT) 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, and follow the standard pattern exit procedures found in the Aeronautical Information Manual (AIM) at other airports.

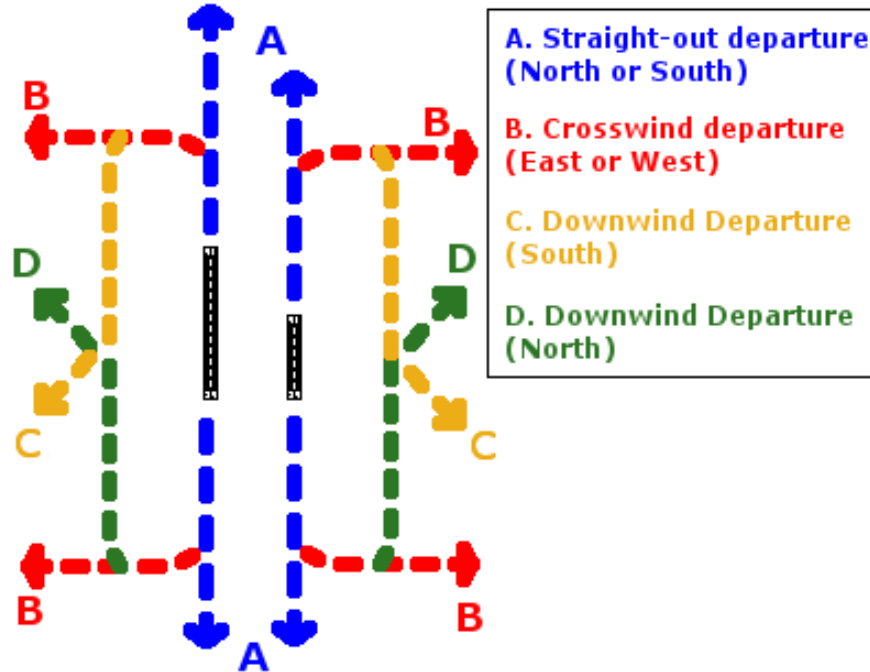


Figure 19 KPAE Traffic Pattern Departures

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 can 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.

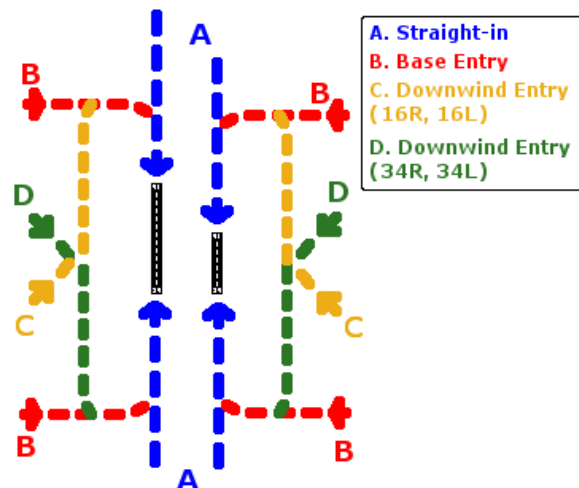


Figure 20 KPAE Traffic Pattern Arrivals

*If ATC instructs you to perform a “straight-in entry” to a runway, you should join that runway’s final approach around two 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

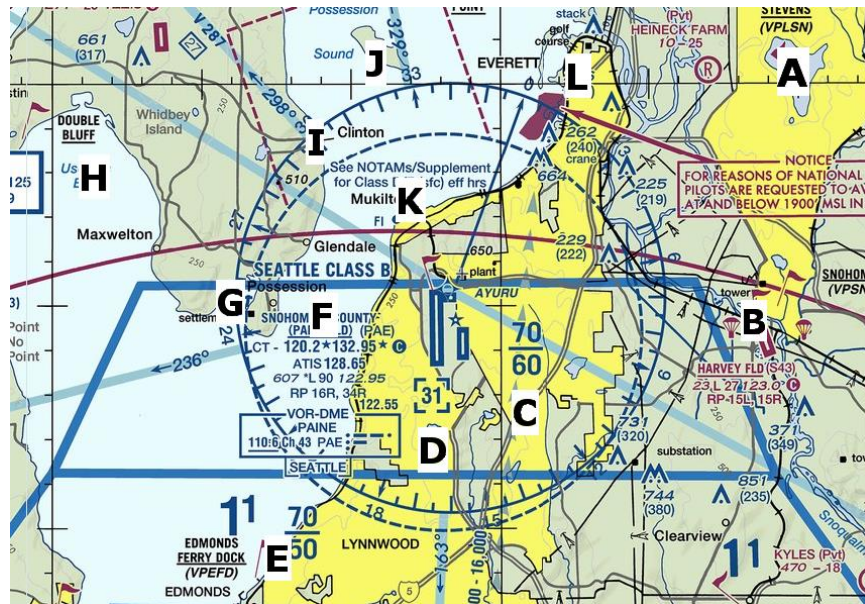


Figure 21 KPAE VFR Reporting Points

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.

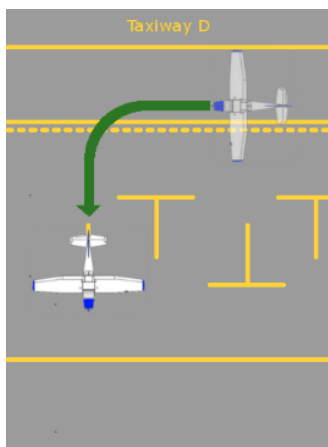


Figure 22 Straight-In Parking

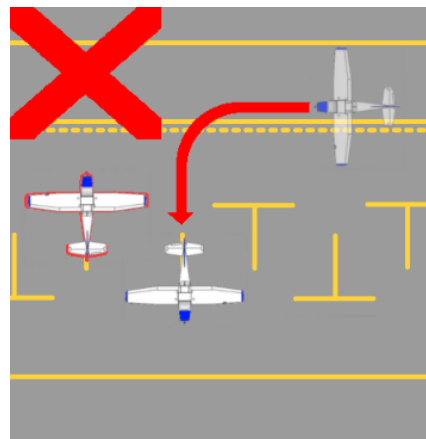


Figure 23 Do not park like this

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.

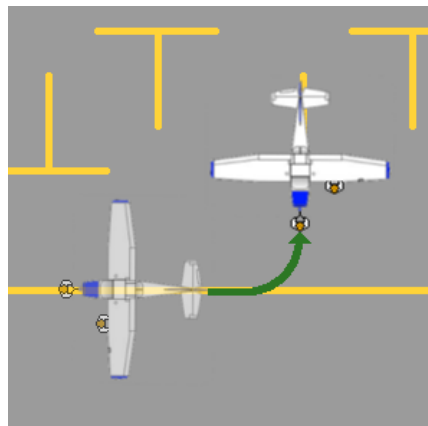


Figure 24 Backing into tiedown spot

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 off.
- **Master switch** is set to the OFF position.
- Ensure the towbar does not contact the propeller; the steel towbar can easily ding the aluminum 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 private property.
- Pick up any litter left in the airplane.
- Buckle the lap belt and ensure it does not interfere with the door.
 - This **does not apply** to aircraft 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.
- Lock all doors and close all windows

Normal Procedures at Regal Air

Chain Attachments - Cessna



Figure 25 Chain Attachment for Cessna

Chain Attachments – Piper

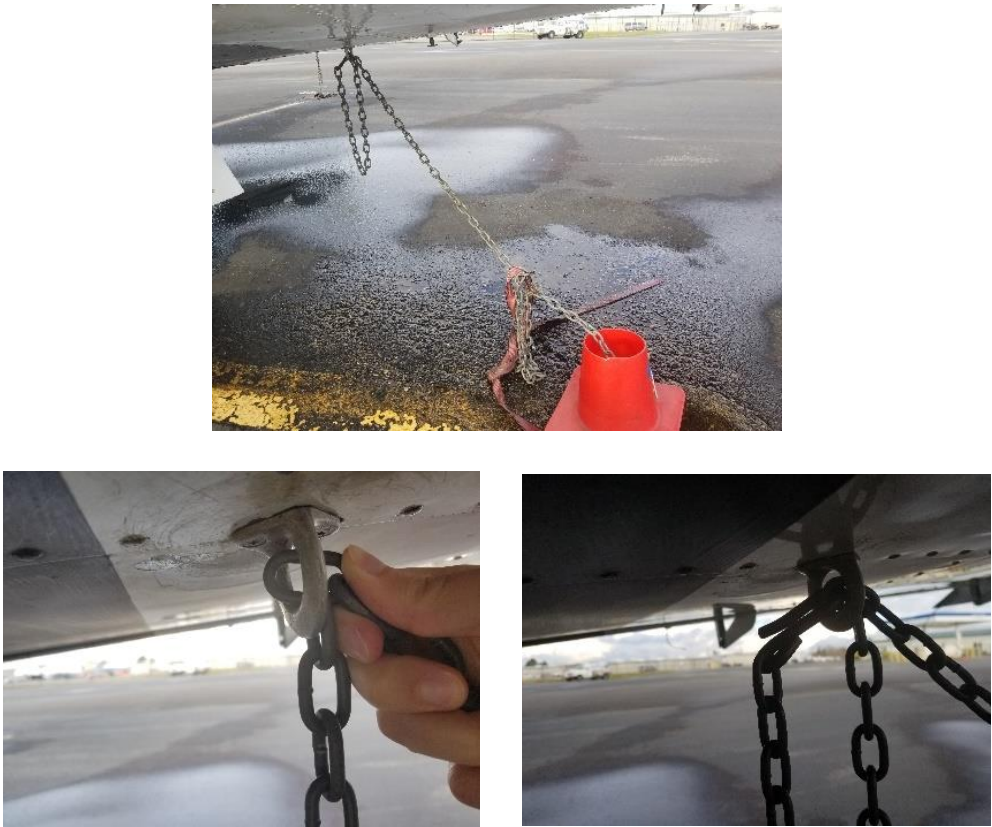


Figure 26 Chain Attachment for Piper

Normal Procedures at Regal Air

Seat Belts – All



Figure 27 Securing Seat Belts

Seat Belt Control Lock and Cover - Piper



Figure 28 Piper Seat Belt Lock and Cover

IV. Maneuvers

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

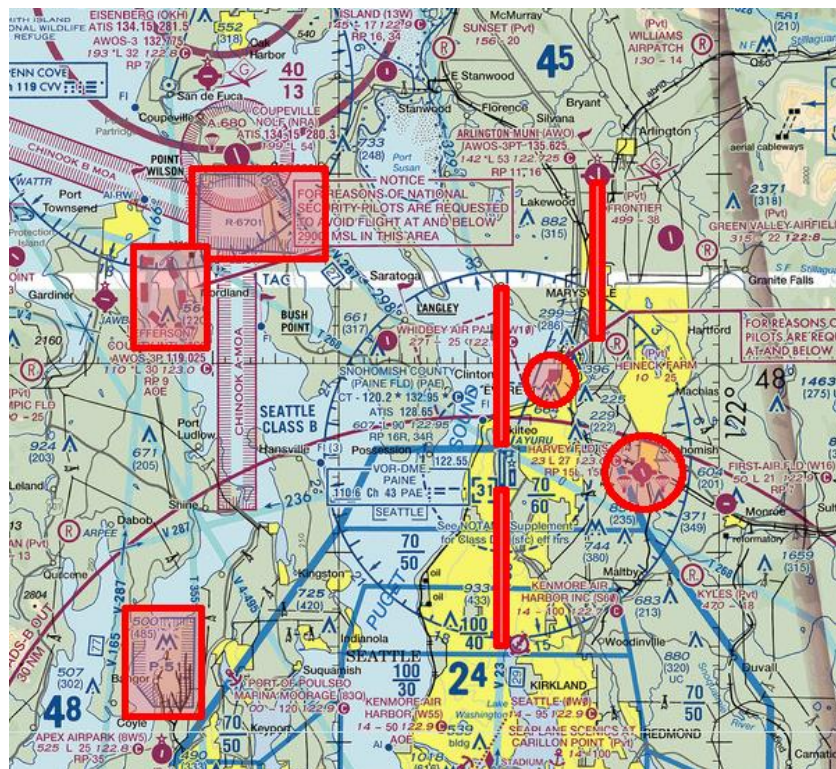


Figure 29 Areas to Avoid

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 Sylvanna
- East of Lake Stevens
- Whidbey Island
- Chimacum Creek valley
 - Valleys south of Jefferson County Airport (0S9)

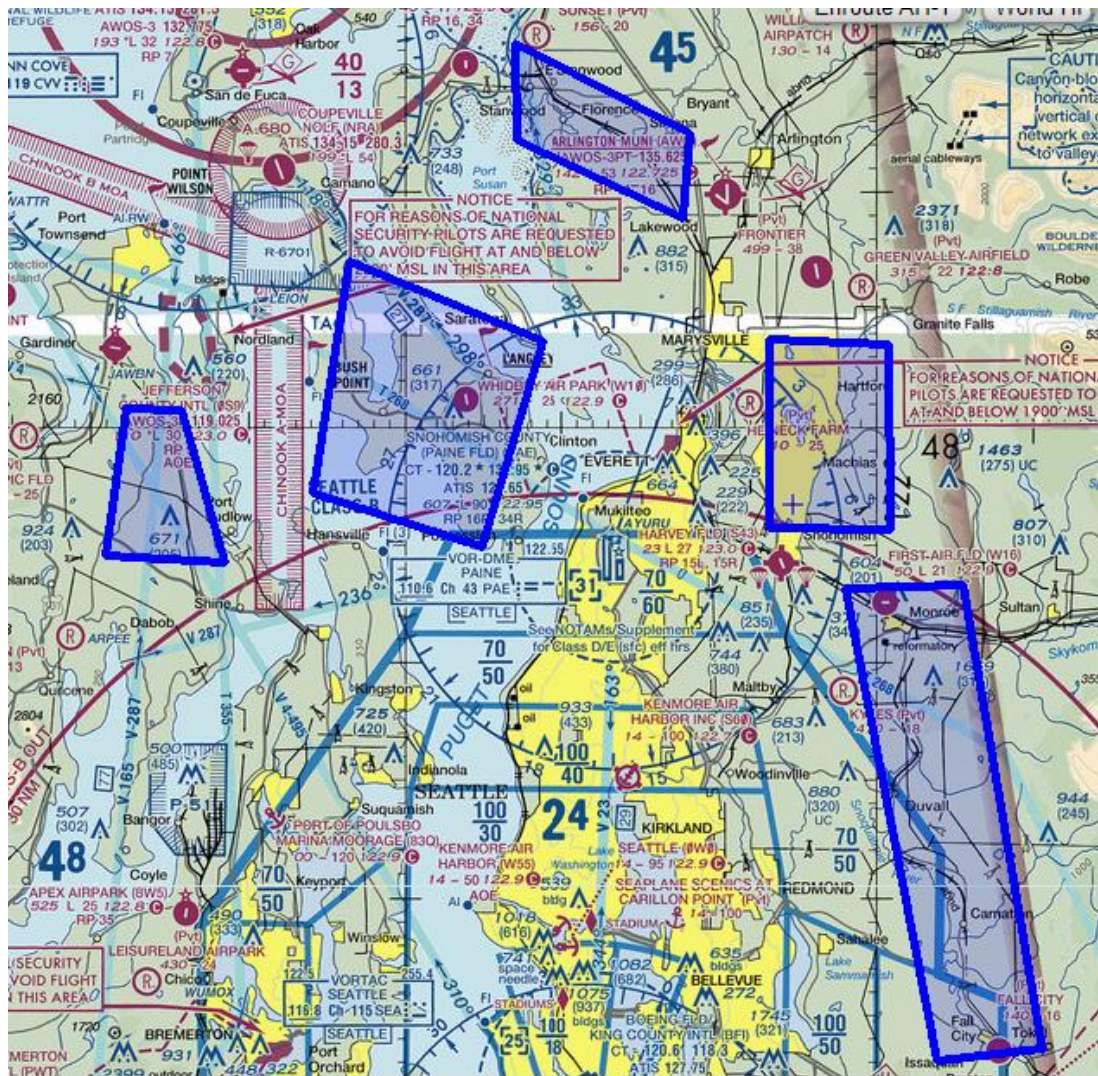


Figure 30 Practice Areas

Maneuvers

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 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. IFR Procedures

IFR Procedures

A. IFR Flight Plans

You may use the Flight Service Station (FSS) to file your flight plans. You can do this via phone by calling 1-800-WX-BRIEF or online by going to www.1800wxbrief.com. You may also use any other third-party system you prefer to file flight plans.

When filing a flight plan for a flight that departs and arrives at the same airport you will need to put a waypoint in the route. For example:

You want to practice ILS approaches at Paine Field (KPAE), so you file

KPAE -> EYWOK -> KPAE.

Many systems will not accept filing only KPAE -> KPAE.

If you will be conducting approaches at several airports, ATC has asked that we file a flight plan for each airport. For example:

You will depart Paine Field (KPAE) to perform a localizer (LOC) approach at Arlington (KAWO), then fly back to KPAE to perform a GPS 34L approach. You should file two flight plans making sure to file the intended initial approach fix (IAF):

1. KPAE -> SAVOY -> KAWO

2. KAWO -> RARYO -> KPAE

B. Requesting Your Clearance

It is preferred to request your IFR clearance from your designated parking spot instead of in the runup area. Space is limited in the runup areas and receiving a clearance can take a long time.

Please make sure your propeller wash is not aimed at a building or other aircraft while picking up your instrument clearance.

“Paine Clearance, N738SE, Ready to Copy IFR to Bellingham”

Alternatively, you may also pick up your clearance after departure if the weather conditions allow for a VFR departure.

C. Approach Profile -Lateral Navigation Only (C172)

For LP (GPS), LNAV (GPS), VOR, VOR/DME, LOC, and LOC/DME approaches

Key Power Settings

- **Cruise:** 2,100 RPM – 2,500 RPM (as indicated in performance charts)
- **Cruise Descent:** 2,000 RPM @ Cruise Speed
- **Terminal Area Level Flight:** 2,100 RPM (~90 KIAS)
- **Approach Descent (No Vertical Guidance):** 1,700 RPM @ 85 KIAS (~700 FPM)
with 10° flaps

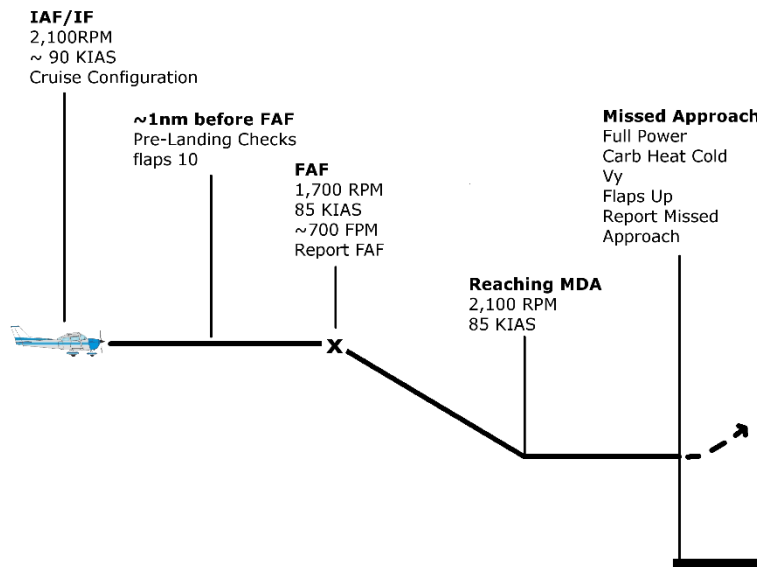


Figure 31 Lateral NAV Approach Profile (C172)

D. Approach with Vertical Guidance Profile (C172)

For LPV (GPS), LNAV/VNAV (GPS), and ILS approaches.

Key Power Settings

- **Cruise:** 2,100 RPM – 2,500 RPM (as indicated in performance charts)
- **Cruise Descent:** 2,000 RPM @ Cruise Speed
- **Terminal Area Level Flight:** 2,100 RPM (~90 KIAS)
- **Approach Descent (With Vertical Guidance):** 1,800 RPM @ 85KIAS (~500 FPM)
with 10° flaps

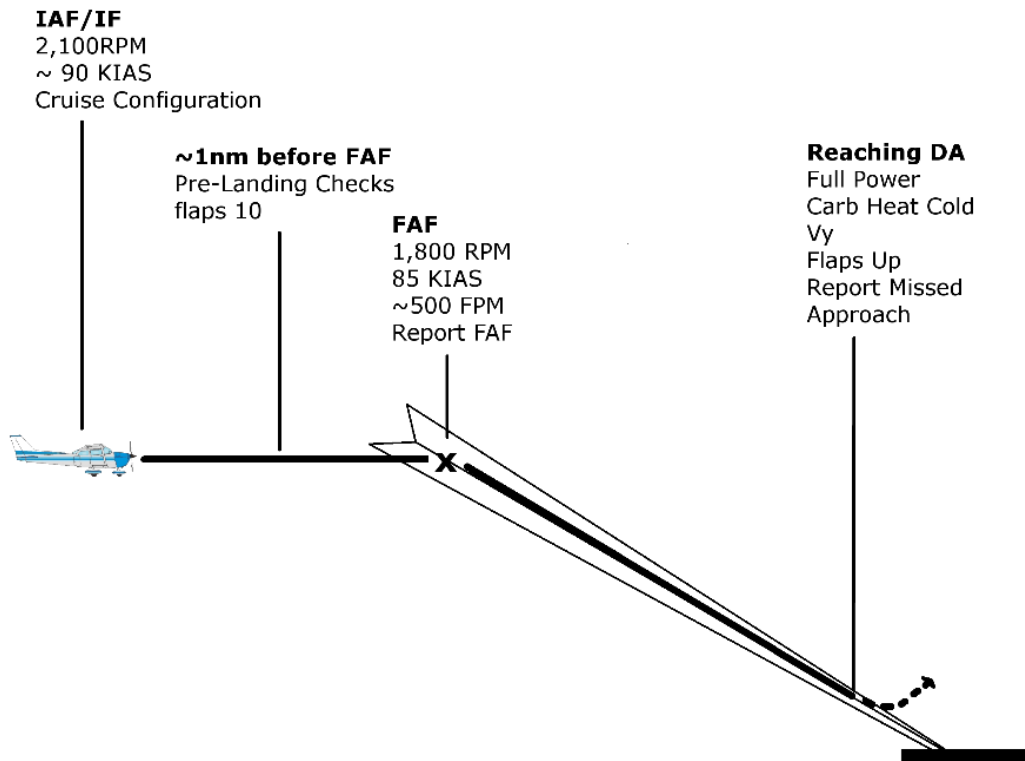


Figure 32 Vertical NAV Approach Profile (C172)

E. Approach Profile – Lateral Navigation Only (PA34)

Approaches may be flown with both engines operating and with a simulated inoperative engine. The approach profile is similar in both cases with a few key differences.

Timing when to put the gear down will become crucial when performing engine inoperative approaches. The airplane may be unable to maintain altitude when the gear is extended. You may wish to keep the landing gear in the up position until landing is assured when performing approaches that require you to hold altitude above an MDA.

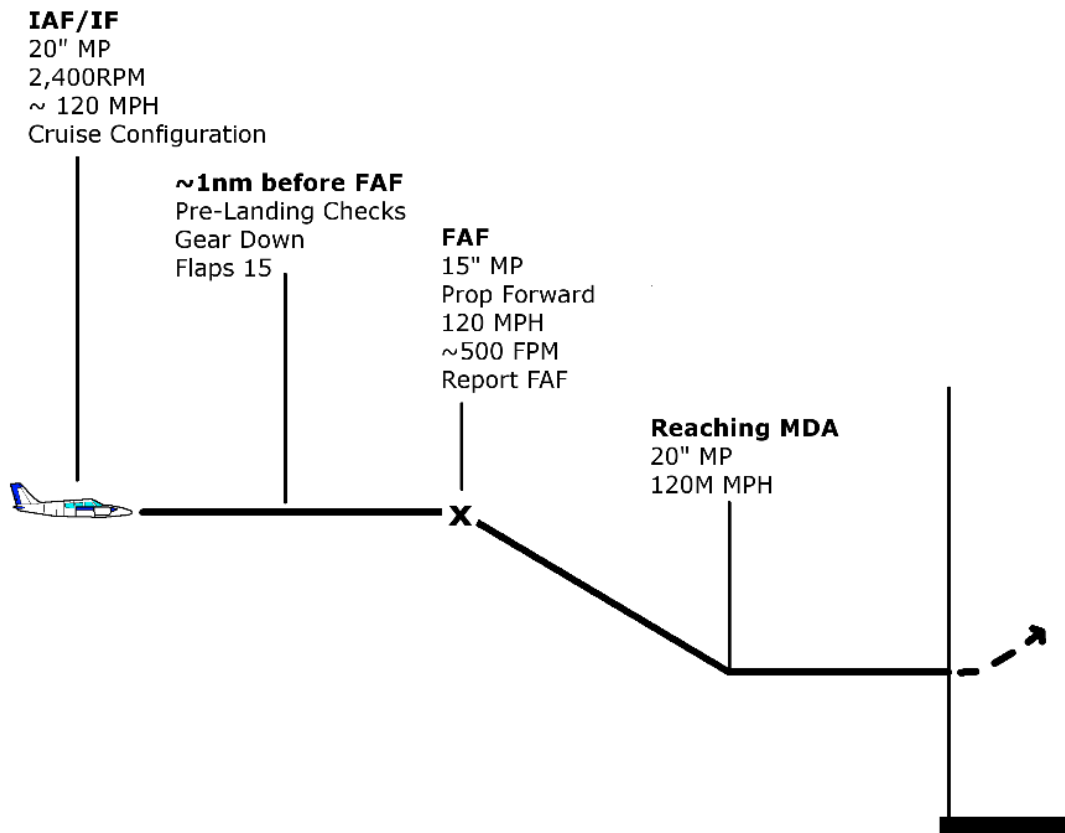


Figure 33 Lateral NAV Approach Profile (PA34)

F. Approach Profile – with Vertical Guidance (PA34)

Approaches with vertical guidance may be flown with both engines operating or with a simulated inoperative engine. The profile is mostly the same regardless of which scenario is being performed. The main difference will be in the power settings required due to the loss of thrust.

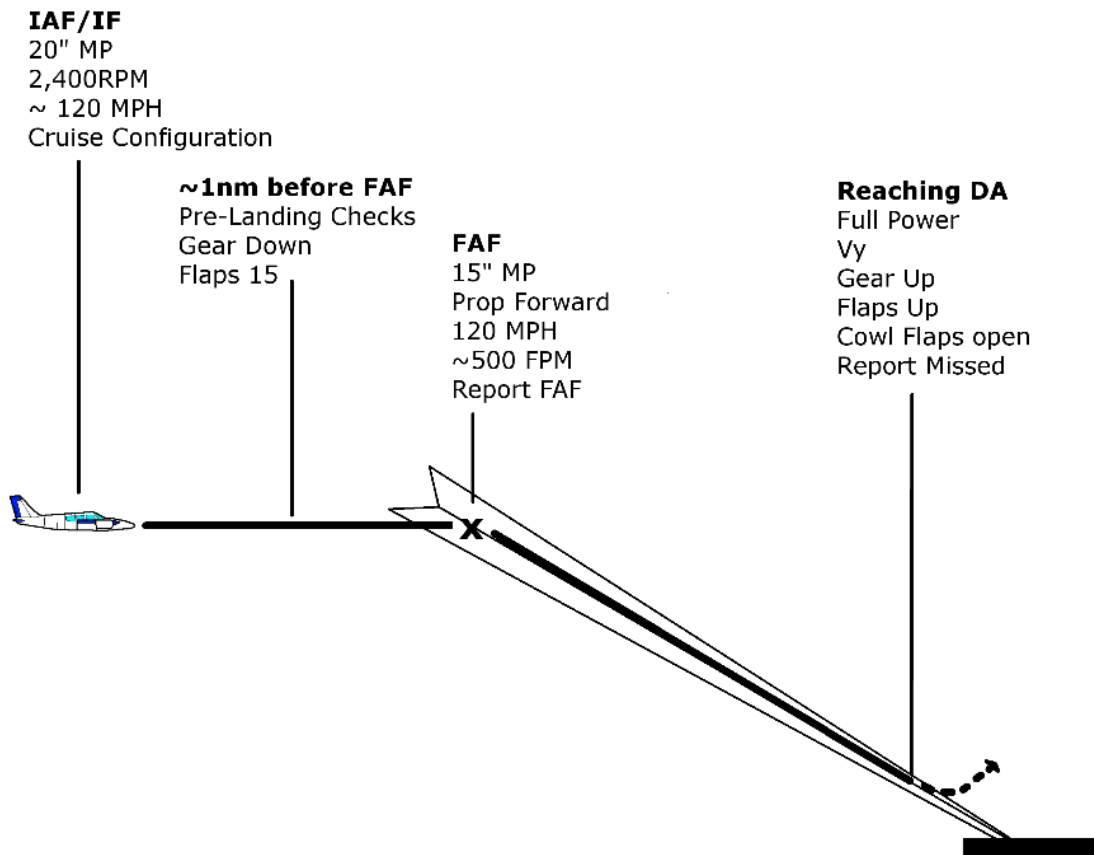


Figure 34 Vertical NAV Approach Profile (PA34)

G. Circle to Land – Inoperative Engine (PA34)

While it is best to avoid performing a circle-to-land procedure with an inoperative engine, there may not be any other options. There are additional risks when performing a circle-to-land procedure on an inoperative engine including:

- May require tight turns at low altitudes in the direction of the failed engine, which causes an over-banking tendency.
- Flying at low altitudes with an inoperative engine, providing less room for error in case of a loss of control.
- May be flying at reduced airspeeds, increasing the risk of loss of control.
- May be unable to maintain altitude with the landing gear extended.
- May forget to extend the landing gear due to changing the normal approach profile.

To minimize risks when performing circle to land:

- Maintain the highest altitude allowed by the weather conditions, no need to maintain altitude at exactly the minimums unless necessary for cloud clearance.
- Maintain sufficient distance from the runway to avoid having to make tight turns.
- Plan your circle-to-land maneuver in a manner that allows you to make turns into the working engine, thus avoiding the over-banking tendency.
- Extend landing gear when starting your landing descent.

VI. Emergency Procedures

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 replacement mix
Emergency Blanket	Fishing Kit
Flagging Tape	Medical Grade Gloves
Multi-Tool Knife	LED Flashlight – 9 Volt
Needles (Sewing)	Parachute Cord
Signal Mirror	Snare Wire
Spark Flint-Tinder Kit	Splint
Whistle	Tube Tent



Figure 35 Survival Kit

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.



Figure 36 Fire Extinguisher

Emergency Procedures

B. Emergency Procedures (All Aircraft)

The following procedures are time critical and should be memorized. You may use a checklist when resolving these emergencies if time allows:

- 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 or 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.

Emergency Procedures

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.

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

C. Emergency Procedures (Multi-Engine Aircraft)

Much of your multi-engine training will focus on emergency procedures. The following procedures are time critical and are required to be **memorized**:

- The first steps of handling an engine failure in cruise:
 1. **“Power-up” / “push-push-push”**
(mixture, propeller, throttle full forward, fuel pumps ON)
 2. **“Clean-up”**
(Flaps and gear up)
 3. **“Identify”**
(dead-foot, dead-engine)
 4. **“Verify”**
(use throttle to verify the dead engine)
 5. **“Fix or Feather”**
(proceed with engine failure checklist if sufficient altitude is available, otherwise feather dead engine)
- Engine failure during the takeoff roll
- Engine failure after liftoff below V_{mc}
- Engine failure after liftoff above V_{mc}
- Recovering from a loss of directional control (V_{mc} recovery)

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

- Engine failure in cruise (trouble shooting steps)
- Securing the failed engine in cruise
- Restarting a feathered engine
- Electrical failures
- Landing gear malfunctions
- All other malfunctions found in the POH

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**.

Emergency Procedures

D. Loss of Communications

If you are unable to contact ATC, first attempt to fix the problem:

- Check COM radio volume.
- Check headset volume and plugs.
- Verify that you are on the correct frequency.
- Verify that you are using the correct radio (COM1 or COM2)
- Try a different radio.
- Try a different ATC frequency.

If unable to communicate with ATC after attempting to fix the problem:

- If you are currently in VMC and have reasonable expectation of being able to reach a nearby airport under VFR, divert to an airport under VFR
- If flying under an IFR flight plan and are unable to proceed under VMC, select a route and altitude based on the following:

Loss of Communications Under IFR

<u>Route</u>	<u>Altitude</u>
In order: Assigned by ATC Expected Filed Route	The highest of: Minimum for segment Expected Assigned
If being vectored: Directly to the expected fix or Join expected route	

E. Equipment Failures Under IFR

If a flight instrument or navigation system has failed:

1. Maintain positive airplane control.
2. Determine how it affects your flight.
3. Use a secondary or backup instrument/system if available.
4. Contact ATC with the following information:
 - a. Tail Number
 - b. Equipment that failed
 - c. How it affects your flight
 - d. What assistance do you require

VII. Flying Solo – Student Pilots

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 at least a third class medical or be current under BasicMed.
- 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 the 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.

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

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.

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

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

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 present 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 section "G" of this chapter.
- 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.

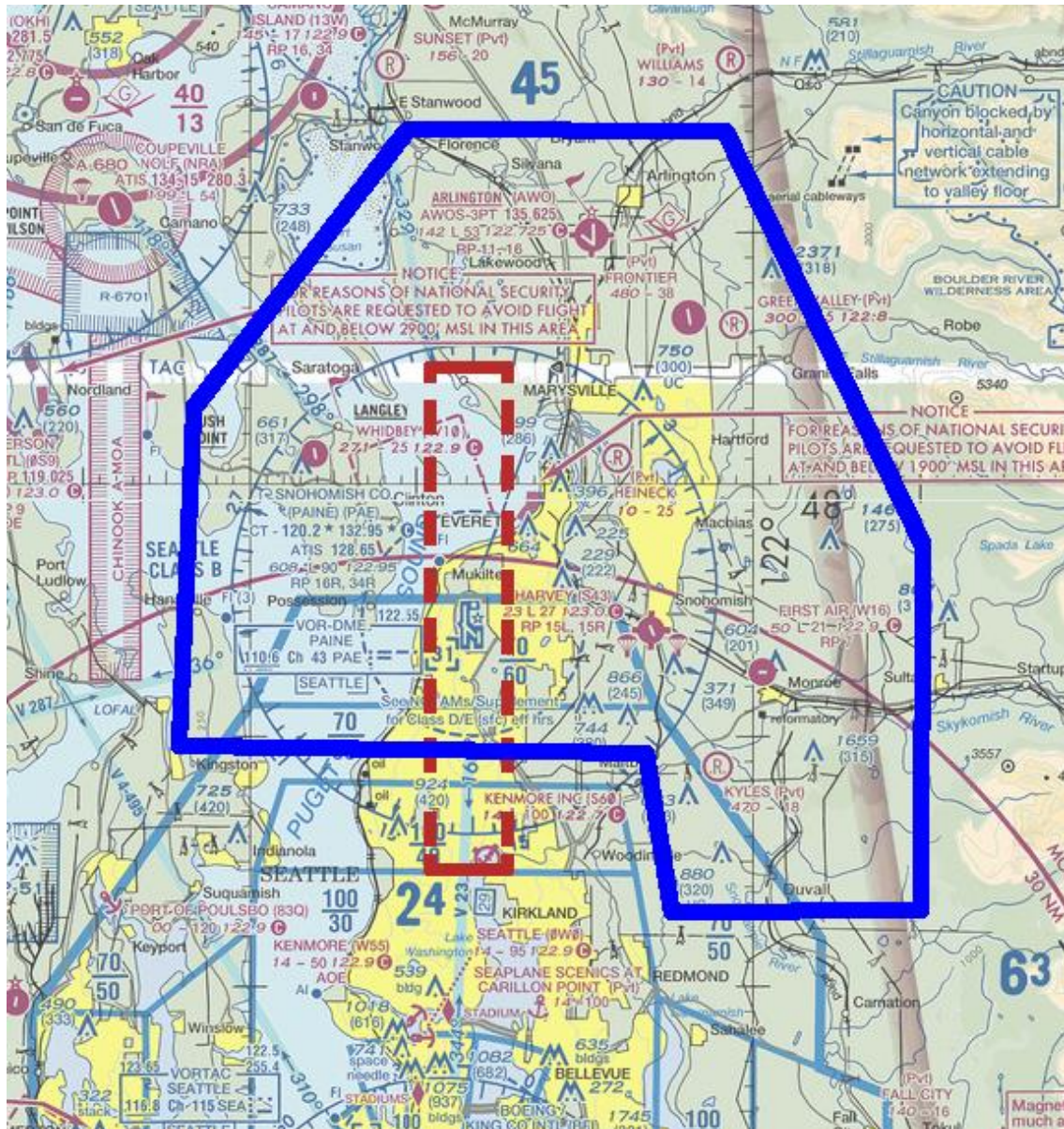


Figure 37 Solo Practice Area

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 privately owned by the student. 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 or 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)

VIII. Privately Owned Airplanes

Privately Owned Airplanes

A. Requirements

Regal Air may be able to 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.
 - You 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
 - Current/Unexpired Registration Certificate
 - POH/AFM (if required)
 - Latest weight and balance information
 - Flight Manual Supplements
 - Required placards
 - The aircraft must be properly equipped for the training being conducted.
- You must have airplane owner's insurance that will cover flight training and understand their requirements to provide coverage.
 - You 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 – Student Pilots

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.