

## Introduction

This syllabus uses the building-block theory of learning, which recognizes that each instructional item must be based on previously learned knowledge and skills. The course is designed so that the academic support materials can be coordinated with the flight lessons. When the coordinated sequence is used, the material pertinent to a flight lesson is taught just before the flight.

### **Enrollment Prerequisites**

The applicants must hold at least a Private Pilot Certificate with an Airplane category rating. In addition, the applicants must meet the experience requirements of FAR Part 61 for the issuance of a Single Engine Sea rating.

### **Graduation Requirements**

To obtain a Single Engine Sea rating, you must be able to read, write and understand the English language and speak it without accent or impediment of speech that would interfere with two-way radio conversation. You must hold at least a Private Pilot certificate and current medical. You must successfully complete all of the ground and flight lessons contained in the syllabus.

### **Course Elements**

The Single Engine Sea Rating Course contains a single stage of separate ground and flight segments. Therefore, the course can be conducted as a combined ground and flight training program, or it can be divided into separate components. Regardless of the method used, the course includes the latest FAA pilot certification requirements and a maximum of student-oriented instruction. The syllabus and support materials not only provide necessary information, but also guide the student through the course in a logical sequence.

### **Ground Lessons**

Ground Lessons should be completed in the order they are listed to provide maximum benefit from application during Flight Lessons. The study assignments reference to sources we recommend to gain the necessary aeronautical knowledge: FAA Seaplane, Skiplane, and Float/Ski Equipped Helicopter Operations Handbook. Study assignments are completed in advance of the lesson so that tasks listed in the mission table are discussed and reviewed instead of introduced. The lesson times assume study assignment completion. Additional time may be necessary without proper preparation.

### **Flight Lessons**

The flight training syllabus is a scenario-based approach to training pilots that emphasizes the development of critical thinking and decision-making skills. A variety of techniques enable students to take a more active role during training, such as planning flights that incorporate scenarios, making and implementing decisions, and measuring their own performance using learner-centered grading.

Completion Standards are based on the applicant applying for an additional rating on a Commercial Pilot certificate. Applicants with a Private Pilot certificate should use the same standards at the discretion of the recommending instructor.

## Scenario-Based Training Philosophy

The flight lessons feature an evolution from task-based training (which focused on separate maneuvers and procedures) to scenario-based training, which recognizes that each flight is a separate combination of many individual tasks and decisions. The scenario-based curriculum incorporates concepts such as risk management, single-pilot resource management (SRM), and aeronautical decision making (ADM) process into every lesson. Tasks designated for each flight lesson are scripted into scenarios that enable students to:

- Relate learning individual training maneuvers to arriving at a destination safely.
- Practice risk assessment, SRM and ADM process during each flight lesson.
- Realize that problems can have multiple solutions.
- Make and implement decisions and see the impact of their actions.
- Consider “what if” problems that provide opportunities to make decisions in a variety of flight situations.
- Recognize that effective decisions sometimes require them to pursue a different plan or overturn a previous decision.
- Recognize and interrupt a chain of missed opportunities and increasing risk.
- Understand that their options narrow as the flight progresses.

## Learner-Centered Grading

Learner-centered grading includes two parts: student self-assessment and a detailed debrief by the instructor. The purpose of the self-assessment is to stimulate growth in the student’s thought processes and, in turn, enhance their ability to plan and conduct tasks in the context of a scenario during flight lessons. After each flight, the student and instructor independently evaluate the tasks performed and the decisions made during the flight. Then, the instructor and student compare evaluations and discuss alternate methods, solutions, and techniques that could have been used by the student to produce a more favorable outcome to the lesson, is appropriate. Learner-centered grading provides an additional opportunity for students to practice solving problems, making decisions, and evaluating the quality of decisions.

### Maneuver (Task) Grades

1. **Describe** – At the completion of the lesson, the student will be able to describe the physical characteristics and cognitive elements of the lesson tasks. *Instructor assistance is required to successfully execute the task.*
2. **Explain** – At the completion of the lesson the student will be able to describe the lesson task and understand the underlying concepts, principles, and procedures that comprise the task. *Instructor assistance is required to successfully execute the task.*
3. **Practice** – At the completion of the lesson, the student is able to plan and execute the task. *Student will correct deviations and errors identified by the instructor.*
4. **Perform** – At the completion of the lesson, the student will be able to perform the task without assistance from the instructor. *Errors and deviations will be identified and corrected by the student in an expeditious manner. At no time will the successful completion of the task be in doubt. (“Perform” will be used to signify that the student has satisfactorily demonstrated proficiency in traditional piloting and systems operation.)*
5. **Not Observed** – Any event not accomplished or required.

### Single Pilot Resource Management (SRM) Grades

SRM includes Task Management (TM), Automation Management (AM), Aeronautical Decision Making (ADM), and Risk Management (RM). SRM should be graded on every flight.

1. **Explain** – The student can verbally identify, describe and understand the risks inherent in the flight mission. *The student will need to be prompted to identify risks and make decisions.*
2. **Practice** – The student is able to identify, understand, and apply SRM principles to the actual flight situation. *Student will correct deviations and errors identified by the instructor.*
3. **Manage/Decide** – The student can correctly gather the most important data available both within and outside the cockpit, identify possible courses of action, evaluate risk inherent in each course of action,

and make the appropriate decision. *Instructor intervention is not required for the safe completion of the flight.*

## Stage I

### Objectives

The applicants will obtain the aeronautical knowledge, skills and experience necessary to obtain a Single Engine Sea rating with an Airplane category rating.

### Completion Standards

The applicants must demonstrate through flight tests and school records the necessary aeronautical skills to obtain a Single Engine Sea rating with an Airplane category rating.

Ground Lesson	Stage I	Flight Lesson
1.0	Ground Lesson 1 – Seaplane Systems	
	Flight Lesson 1 – Intro to Seaplane Operations	1.5
1.0	Ground Lesson 2 – Reading the Water	
	Flight Lesson 2 – Operating on the Water	1.5
1.0	Ground Lesson 3 – Landing and Emergency Procedures	
	Flight Lesson 3 – Landing and Emergency Procedures	1.5
1.0	Ground Lesson 4 – Federal Aviation Regulations	
	Flight Lesson 4 – Advanced Takeoff and Landing	1.5
	Flight Lesson 5 – Practical Test Review	1.5
4.0	Stage Totals	7.5

## **S1GL1 – Seaplane Systems**

Briefing – 1.0 Hour

### **Objectives**

- Discuss course outline and schedule.
- Discuss Rainier Flight Safety Policies and Procedures.
- Introduce seaplane types, components, systems and powerplant operation.
- Calculate weight and balance under various aircraft loading situations.
- Discuss normal operating procedures.

### **Notes to the Student**

Seaplane flying is one of the most fun and challenging experiences in your aviation career. In the air, flying a seaplane is just like any other plane, albeit with a little more drag. Most of the knowledge and maneuvers you have already performed for your Private or Commercial Practical Exam. All you are doing with this training program is applying your previous experience to new situations such as operating a plane on water without brakes, learning new landing techniques and enhancing your aeronautical decision making to new and challenging situations. There is no question this training makes you a better pilot in general so study, relax and have fun!

### **Completion Standards**

- Understands course outline and Safety Policies and Procedures.
- Demonstrates understanding of seaplane components and systems through oral examination.
- Correctly calculates various weight and balance examples.

### **Study Assignment for Ground Lesson 1**

- Complete 8710 Airman Application online (Do not submit) <https://iacra.faa.gov/iacra/>
- Complete Pilot Info sheet and Rental Agreement
- Download and review Rainier Safety Policies and Procedures
- Download and review ASES Standardization Manual
- Download and review American Scout POH
- Bring pilot certificate, medical and logbook

Ground Lesson 1			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Briefing	RFS Policies & Procedures	Perform					
	Amphibian	Perform					
	Floatplane	Perform					
	Flying Boat	Perform					
	Floats and Hull Construction	Perform					
	Water Rudders	Perform					
	Flight Controls	Perform					
	Powerplant and Propeller	Perform					
	Fixed Pitch	Perform					
	Constant Speed	Perform					
	Ignition System	Perform					
	Electrical System	Perform					
	Fuel System	Perform					
	Oil System	Perform					
	Normal Procedures	Perform					
Weight and Balance	Perform						
Precautions and Operational Considerations	Perform						
Postflight Briefing	Critique Student Performance	Explain					
	Critique Effectiveness of ADM	Explain					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					

## **S1FL1 – Intro to Seaplane Operations**

Dual Local – 1.5 Hours

### **Mission**

You are purchasing your first seaplane and taking a demo flight. Everything checks out on the pre-buy inspection but as PIC you want to verify airworthiness including inspections, placards and equipment. The seller is very motivated and wants to show you how well the airplane performs and close the deal!

### **Objectives**

- Introduce the training seaplane's operating characteristics, limitations, cockpit controls, instruments and systems.
- Introduce preflight procedures, use of checklists and safety precautions to be followed.

### **Notes to the Student**

Determining airworthiness is a complicated but important process best learned early-on so you can apply the practice throughout the training course. Read the blog article on the Rainier website to assist the decision making process.

The first flight is always a rush of information. At times it will feel like things are happening faster than you can keep up with – but that feeling will pass as you learn to anticipate what to expect. The amount of studying done prior to training will determine the ease of this lesson and lessons to come. Your instructor will do most of the work this time, but this lesson is not a 'ride'. You are going to be flying the airplane the majority of the time. Your instructor will walk you through ATC procedures and communications while you focus on flying. Don't get overwhelmed because you don't need to know everything at once. Relax and have some fun!

### **Completion Standards**

- Meet the desired outcomes listed in the Mission Table. The shaded areas in the tables indicate the minimum desired outcome level for this flight lesson.
- The applicant will be able to conduct a pre-flight, use checklists and display coordination in all piloting fundamentals.

### **Study Assignment for Flight Lesson 1**

- Seaplane Flying Handbook - Chapter 2 – Principles of Seaplanes

Flight Lesson 1			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Preflight Briefing	Lesson Objective and Completion Standards	Practice					
	Aircraft Familiarization and Preflight	Practice					
	Certificates and Documents	Practice					
	Performance and Limitations	Practice					
	Weight and Balance	Practice					
	Weather Information	Practice					
	Seaplane Servicing	Practice					
	Use of Checklist	Practice					
Introduce	Engine Starting	Explain					
	Use of Water Rudders	Explain					
	Pre-Takeoff Check	Explain					
	Normal Takeoff	Explain					
	Climbs	Explain					
	Straight and Level Flight	Explain					
	Slow Flight	Explain					
	Steep Turns	Explain					
	Power-On Stall (straight and turning)	Explain					
	Power-Off Stall (straight and turning)	Explain					
	Accelerated Stall	Explain					
	Descents and Glides	Explain					
	Seaplane Base Traffic Pattern	Explain					
	Prelanding Check	Explain					
	Normal Landing	Explain					
	After Landing Check	Explain					
Aircraft Shutdown	Explain						
Aircraft Mooring	Explain						
Aeronautical Decision Making	Risk Management	Explain					
	SRM Concepts	Explain					
	ADM Process	Explain					
Postflight Briefing	Critique Student Performance	Explain					
	Critique Effectiveness of ADM	Explain					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					



## **S1GL2 – Reading the Water**

Briefing – 1.0 Hour

### **Objectives**

- Discuss methods of determining wind direction and surface conditions.
- Discuss taxi and takeoff techniques under varying wind conditions.

### **Notes to the Student**

In landplane flying the wind direction and strength are checked during preflight briefings and few times during flight, crosswind taxi controls are usually forgotten after they are introduced early on in training and the runway used for takeoff and landing is often determined by tower controllers leaving the pilot sometimes unaware of changing winds. In seaplane flying wind is always on a pilots mind. Wind does not only affect the way the airplane handles but it also changes the surface condition of the water. Throw in changing currents, tide movements, underwater obstructions and jet skis and all of a sudden your “runway” has many new variables! Luckily there are many ways nature informs us of wind and water conditions. In this lesson you will learn where to look for these cues and how to interpret them.

### **Completion Standards**

- Demonstrates understanding of determining wind direction and surface conditions through oral examination.
- Understands taxi and takeoff techniques under varying wind conditions.

### **Study Assignment for Ground Lesson 2**

- Seaplane Flying Handbook – Chapter 3 – Water Characteristics and Seaplane Base Operations

Ground Lesson 2			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Briefing	Determining Wind Direction	Perform					
	Glassy Water	Perform					
	Calm Water	Perform					
	Choppy/Rough Water	Perform					
	Swells	Perform					
	Debris (floating/submerged)	Perform					
	Sandbars	Perform					
	Position Idling	Perform					
	Plow Taxi	Perform					
	Step Taxi	Perform					
	Sailing	Perform					
	Normal Takeoff	Perform					
	Climb at Vx and Vy	Perform					
	Confined Area	Perform					
	Cruise Climb	Perform					
Noise Abatement Procedures	Perform						
Postflight Briefing	Critique Student Performance	Perform					
	Critique Effectiveness of ADM	Perform					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					

## **S1FL2 – Operating on the Water**

Dual Local – 1.5 Hours

### **Mission**

Your good friend has a house on Lake Tapps and has invited you to a BBQ. His dock is perfect to secure a seaplane so you decide to make a dramatic entrance in your new ride. While there you plan on offering a few rides to nearby lakes to share the experience. Just be careful for all the boat traffic on this beautiful summer day!

### **Objectives**

- Review normal takeoffs and landings.
- Introduce taxiing techniques under various wind conditions.
- Introduce aborted takeoffs and accuracy landings.

### **Notes to the Student**

At most public airports the FAA has set standards for how runways and taxiways are laid out and how they are marked and labeled. When landing on the water there are no standards. It is up to the pilot to determine where he or she can land based on all the factors discussed in ground lesson 2. Here you will have the opportunity to fly to Lake Tapps and possibly other lakes in the area, each with its own set of challenges. You will use your knowledge to determine where the best place to land is and the direction. Always make sure that there is no traffic or obstructions near your place of intended landing or underneath the surface in the area. You will then have to use the most appropriate method of taxiing to get to the shore. Your instructor will assist and inform you of the ways to find all available information about each body of water.

### **Completion Standards**

- Meet the desired outcomes listed in the Mission Table. The shaded areas in the tables indicate the minimum desired outcome level for this flight lesson.
- Demonstrate proper planning, judgment and positive control of the aircraft while taxiing.

### **Study Assignment for Flight Lesson 2**

- Seaplane Flying Handbook – Chapter 4 – Preflight and Takeoffs
- Seaplane Flying Handbook – Chapter 5 – Performance

Flight Lesson 2			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Preflight Briefing	Lesson Objective and Completion Standards	Practice					
	Noise Abatement Procedures	Explain					
	Taxiing	Explain					
	Porpoising	Explain					
	Judging Distance	Explain					
Introduce	Idle Taxi	Explain					
	Plow Taxi	Explain					
	Step Taxi	Explain					
	Idle Turns	Explain					
	Plow Turns	Explain					
	Step Turns	Explain					
	Accuracy Landing	Explain					
Review	Engine Starting	Practice					
	Use of Water Rudders	Practice					
	Pre-Takeoff Check	Practice					
	Normal Takeoff	Practice					
	Climbs	Practice					
	Straight and Level Flight	Practice					
	Slow Flight	Practice					
	Steep Turns	Practice					
	Power-On Stall (straight and turning)	Practice					
	Power-Off Stall (straight and turning)	Practice					
	Accelerated Stall	Practice					
	Descents and Glides	Practice					
	Seaplane Base Traffic Pattern	Practice					
	Prelanding Check	Practice					
	Normal Landing	Practice					
	After Landing Check	Practice					
	Aircraft Shutdown	Practice					
Aircraft Mooring	Practice						
Aeronautical Decision Making	Risk Management	Practice					
	SRM Concepts	Practice					
	ADM Process	Practice					
Postflight Briefing	Critique Student Performance	Explain					
	Critique Effectiveness of ADM	Explain					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					

## **S1GL3 – Landing and Emergency Procedures**

Briefing – 1.0 Hour

### **Objectives**

- Discuss performance charts and calculate enroute power settings, speed and fuel burn.
- Discuss landing techniques in various wind conditions.
- Discuss various mooring procedures.
- Discuss abnormal and emergency procedures.

### **Notes to the Student**

We never expect things to go wrong in flight, but nevertheless we plan and practice for the day when something goes wrong. Dealing with abnormal situations, malfunctioning equipment, and emergency situations is the greatest challenge any pilot will face. It pays to be ready. An emphasis will be placed on how emergencies are handled specifically in a seaplane. There are also emergency situations and equipment specific to seaplanes that a pilot must be familiar with. Go back over the airplane systems in preparation for this lesson. Knowing how your systems work is the key to doing the right thing when the systems stop working properly. Your instructor will present several abnormal situations, malfunctions, and emergencies in this lesson, so review your emergency procedures and checklists to be ready!

### **Completion Standards**

- Correctly calculates performance using Seaplane POH charts and/or graphs.
- Understands how to apply correct landing technique for various wind and surface conditions.
- Understands various methods for securing seaplane.
- Understands abnormal and emergency procedures through oral examination.

### **Study Assignment for Ground Lesson 3**

- Seaplane Flying Handbook – Chapter 8 – Emergency Open Sea Operations
- Review POH Abnormal/Emergency Procedures

Ground Lesson 3			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Briefing	Seaplane POH Performance Charts/Graphs	Perform					
	Glassy Water Landing	Perform					
	Calm Water Landing	Perform					
	Choppy/Rough Water Landing	Perform					
	Landing in Swells	Perform					
	Confined Area Landing	Perform					
	Current/Tidal Effects	Perform					
	Anchoring	Perform					
	Mooring	Perform					
	Docking	Perform					
	Sailing	Perform					
	Beaching	Perform					
	Systems and Equipment Malfunctions	Perform					
	Loss of Radio Communications	Perform					
Lost Procedures	Perform						
Postflight Briefing	Critique Student Performance	Perform					
	Critique Effectiveness of ADM	Perform					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					

## **S1FL3 – Landings and Emergency Procedures**

Dual Local – 1.5 Hours

### **Mission**

Time to go fishing! It's trout season on the lake and you've got all day to set anchor and catch your limit. You think the only problem is where to put all the fish?? But this day is nothing like it was planned to be...

### **Objectives**

- Review normal takeoffs and landings.
- Introduce taxiing techniques under various wind conditions.
- Introduce aborted takeoffs and accuracy landings.
- Introduce sailing, docking, beaching and securing techniques.

### **Notes to the Student**

As we arrive to our favorite fishing spot we will soon determine that this is not going to be a normal day. For some reason nothing goes according to plan. The winds are stronger and from a different direction than we had anticipated, the dock we planned on using is damaged and many of our airplane's systems seem to be acting up! In this lesson we will cover the many ways to secure the plane such as docking, ramping and anchoring. We will also discuss and practice the procedures for equipment malfunctions and all things irregular such as maneuvering the plane in high winds, go arounds, and emergency landings and decents.

### **Completion Standards**

- Meet the desired outcomes listed in the Mission Table. The shaded areas in the tables indicate the minimum desired outcome level for this flight lesson.
- Demonstrate proper planning, judgment and positive control of the aircraft while taxiing.
- Demonstrate proper planning, judgment, timing and aircraft control while sailing, docking and beaching.

### **Study Assignment for Flight Lesson 3**

- Seaplane Flying Handbook – Chapter 6 - Landings
- Determine if you can land on Lake Youngs.

Flight Lesson 3			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Preflight Briefing	Lesson Objective and Completion Standards	Practice					
	Emergency Procedures	Explain					
	Sailing	Explain					
	Securing Aircraft	Explain					
	Approaching Objects	Explain					
Introduce	Aborted Takeoff	Explain					
	Crosswind Takeoff/Landing	Explain					
	Sailing	Explain					
	Anchoring	Explain					
	Docking	Explain					
	Beaching	Explain					
	Approach to a Buoy (actual or simulated)	Explain					
	Approach to a Pier (actual or simulated)	Explain					
	Approach to a Ramp (actual or simulated)	Explain					
	Go-Arounds	Explain					
	Emergency Decent	Explain					
	System and Equipment Malfunctions	Explain					
	Review	Idle Taxi	Practice				
Plow Taxi		Practice					
Step Taxi		Practice					
Idle Turns		Practice					
Plow Turns		Practice					
Step Turns		Practice					
Accuracy Landing		Practice					
Aeronautical Decision Making	Risk Management	Practice					
	SRM Concepts	Practice					
	ADM Process	Practice					
Postflight Briefing	Critique Student Performance	Explain					
	Critique Effectiveness of ADM	Explain					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					



## **S1GL4 – Federal Aviation Regulations**

Briefing – 1.0 Hour

### **Objectives**

- Discuss federal aviation regulations pertaining to seaplane operations.
- Discuss other sources of information available for flight planning, operations and safety.

### **Notes to the Student**

Once the airplane is off of the water your previous training has told you what you can and cannot do. In this lesson we will pick through the FAR/AIM and discuss the regulations specific to seaplanes. We will also look over a few new resources specific to seaplanes such as the seaplane water landing directory.

### **Completion Standards**

- Understands federal aviation regulations applicable to seaplane operations.
- Understands where to find information necessary to plan and conduct a flight safely.

### **Study Assignment for Ground Lesson 4**

- Seaplane Flying Handbook – Chapter 1 – Rules, Regulations, and Aids for Navigation
- Review FAR Part 91 regulations pertaining to seaplane operations.
- Review information available in the Water Landing Directory.

Ground Lesson 4			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Briefing	FAR Part 1	Perform					
	FAR Part 61	Perform					
	FAR Part 91	Perform					
	NTSB Part 830	Perform					
	Maritime Rules	Perform					
	Maritime Navigation Aids	Perform					
	Seaplane Association Guide	Perform					
Postflight Briefing	Critique Student Performance	Perform					
	Critique Effectiveness of ADM	Perform					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					

## **S1FL4 – Advanced Takeoff and Landing**

Dual Local – 1.5 Hours

### **Mission**

The local Seaplane Pilots Association chapter is hosting a social event at Lake Meridian. About one dozen airplanes will participate in fun contests following by a picnic at Lake Meridian Park.

### **Objectives**

- Introduce takeoff and landing techniques for choppy and rough water conditions.
- Introduce takeoff and landing techniques in glassy water conditions.
- Introduce operating in a confined area.
- Introduce takeoff and landing techniques at high density altitudes.

### **Notes to the Student**

Since our 'runway' is always varying in shape, texture and size we have many new techniques the must be mastered for the safety of you, your passengers and the wellbeing of your aircraft. During training it is not uncommon to mix these techniques up when practicing them back to back. So it is important to not just memorize the configurations but to understand how they work and why they are being used.

Often two or more techniques are combined depending on the conditions, can you think of any examples?

### **Completion Standards**

- Meet the desired outcomes listed in the Mission Table. The shaded areas in the tables indicate the minimum desired outcome level for this flight lesson.
- Demonstrate correct downwind and choppy water techniques.
- Demonstrate correct glassy water techniques.
- Demonstrate correct confined area techniques.
- Demonstrate correct techniques for operating at a high density altitude.

### **Study Assignment for Flight Lesson 4**

- Review as assigned by instructor.

Flight Lesson 4			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Preflight Briefing	Lesson Objective and Completion Standards	Practice					
	Operating on Glassy Water	Explain					
	Operating on Rough/Choppy Water	Explain					
	Operating in a Confined Area	Explain					
	Operating at High Density Altitudes	Explain					
	Night Operations	Explain					
Introduce	Downwind Takeoff	Explain					
	Glassy Water Takeoff and Landing	Explain					
	Choppy Water Takeoff and Landing	Explain					
	Rough Water Takeoff and Landing	Explain					
	Confined Area and Max Performance Climb	Explain					
	High Density Altitude Takeoff	Explain					
	Night Landing - Simulated	Explain					
Review	Aborted Takeoff	Practice					
	Crosswind Takeoff/Landing	Practice					
	Sailing	Practice					
	Anchoring	Practice					
	Docking	Practice					
	Beaching	Practice					
	Approach to a Buoy (actual or simulated)	Practice					
	Approach to a Pier (actual or simulated)	Practice					
	Approach to a Ramp (actual or simulated)	Practice					
	Go-Arounds	Practice					
	System and Equipment Malfunctions	Practice					
Aeronautical Decision Making	Risk Management	Practice					
	SRM Concepts	Practice					
	ADM Process	Practice					
Postflight Briefing	Critique Student Performance	Practice					
	Critique Effectiveness of ADM	Practice					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					

## **S1FL5 – Practical Test Review**

Dual Local – 1.5 Hours

### **Mission**

There is no mission for this lesson other than reviewing deficient areas in preparation for the Practical Exam.

### **Objectives**

- Review all previously introduced maneuvers and procedures in preparation for practical test.

### **Notes to the Student**

Hopefully you have been taking good notes through your training. Now it is time to review your notes and find the areas you are consistently weak in and determine why those areas are deficient. Usually when something is repeatedly done incorrectly there is something that is not understood. You and your instructor must find those weak areas and figure out the missing link.

### **Completion Standards**

- Meet the desired outcomes listed in the Mission Table. The shaded areas in the tables indicate the minimum desired outcome level for this flight lesson.
- Demonstrate all knowledge and maneuvers to the proficiency level required by current Practical Test Standards.

### **Study Assignment for Flight Lesson 5**

- Review Private/Commercial Practical Test Standards

Flight Lesson 5			Task Grades				
Mission Table			Describe	Explain	Practice	Perform/Manage	Not Observed
Scenario Activity	Task	Desired Performance					
Preflight Briefing	Lesson Objective and Completion Standards	Perform					
	Performance and Limitations	Perform					
	Operation of Systems	Perform					
	Water and Seaplane Characteristics	Perform					
	Seaplane Bases, Maritime Rules, and Aids to Marine Navigation	Perform					
Review	Taxiing and Sailing	Perform					
	Runway Incursion Avoidance	Perform					
	Seaplane Base, Runway, and Taxiway Signs, Markings and Lighting	Perform					
	Normal and Crosswind Takeoff and Climb	Perform					
	Normal and Crosswind Approach and Landing	Perform					
	Confined Area Takeoff and Max Performance Climb	Perform					
	Confined Area Approach and Landing	Perform					
	Glassy Water Takeoff and Climb	Perform					
	Glassy Water Approach and Landing	Perform					
	Rough Water Takeoff and Climb	Perform					
	Rough Water Approach and Landing	Perform					
	Emergency Descent	Perform					
	Emergency Approach and Landing (simulated)	Perform					
	Systems and Equipment Malfunctions	Perform					
	Anchoring	Perform					
Docking and Mooring	Perform						
Ramping and Beaching	Perform						
Aeronautical Decision Making	Risk Management	Perform					
	SRM Concepts	Perform					
	ADM Process	Perform					
Postflight Briefing	Critique Student Performance	Perform					
	Critique Effectiveness of ADM	Perform					
	Update Records and Logbook	o Completed					
	Discuss Remedial Activities	o Completed					
	Assign Material for Next Flight Lesson	o Completed					