



Notes of a Seaplane Instructor

An Instructional Guide to Seaplane Flying



Second Edition

Burke Mees

Notes of a Seaplane Instructor: An Instructional Guide to Seaplane Flying
Second Edition
by Burke Mees

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Contents

Foreword	<i>xi</i>
Introduction	<i>xiii</i>

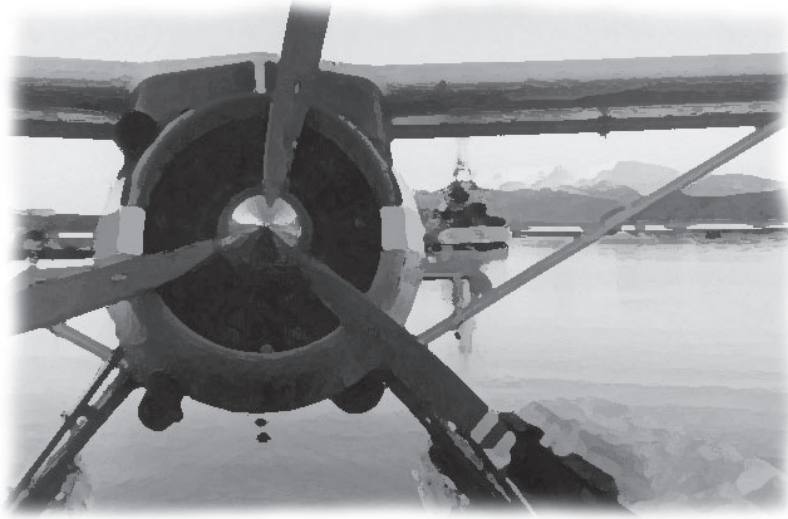
Part I • Basic Maneuvers

1	Preflight	<i>1</i>
2	Taxi	<i>5</i>
3	Takeoff	<i>9</i>
	Normal Takeoff	<i>9</i>
	Porpoising	<i>10</i>
	Drag on Takeoff	<i>11</i>
	Variations of the Normal Takeoff	<i>12</i>
	Glassy Water Takeoff	<i>12</i>
	Rough Water Takeoff	<i>13</i>
	A Word About Rotating	<i>15</i>
	One-Float Takeoff	<i>15</i>
	Other Takeoffs	<i>17</i>
	Takeoff Performance	<i>17</i>
4	Flying Characteristics	<i>19</i>
	Drag	<i>19</i>
	Yaw Stability	<i>20</i>
5	Before Landing	<i>25</i>
6	Landings	<i>31</i>
	Normal Landing	<i>31</i>
	Touchdown Waterspeed	<i>34</i>
	Rough Water Landing	<i>35</i>
	Glassy Water Landing	<i>36</i>

	Short Field Landing	41	
	Crosswind Landing	43	
	Engine Failure Landing	44	
	Night Landings	45	
7	Step Taxi and Step Turns	47	
8	Yaw Stability on the Step	57	
9	Water Handling	63	
	The Plow Concept: The Idea of Variable Weathervaning		63
	Applications of the Plow Concept	68	
	Crosswind Taxi	72	
	Crosswind Takeoff	72	
	Sailing	76	
	Power-Off Sailing	76	
	Applications of Power-Off Sailing	84	
	Power-On Sailing	88	
10	Postflight Procedures	95	
	Docking	95	
	Beaching	107	
	Ramping	110	
	Mooring or Anchoring	115	
11	Weight and Balance and Takeoff Performance		117
	Weight	117	
	Balance	118	

Part II • Advanced Topics

12	<i>Mountain Flying</i>	<i>123</i>
13	<i>Density Altitude</i>	<i>135</i>
14	<i>Current</i>	<i>145</i>
	Taxi Maneuverability	<i>145</i>
	Landing	<i>148</i>
	Takeoff	<i>153</i>
	Beaching and Docking	<i>154</i>
	Reading the Water	<i>157</i>
	Tidal Current	<i>157</i>
15	<i>Amphibious Floatplanes</i>	<i>159</i>
16	<i>Cold Weather Operations</i>	<i>165</i>
17	<i>Multiengine Seaplanes</i>	<i>171</i>
	Conclusion	<i>181</i>
	List of Terms Used in Seaplane Operations	<i>183</i>
	Appendix 1: Pumping the Floats	<i>185</i>
	Appendix 2: Ropes and Splicing	<i>189</i>



Preflight

Since every flight begins with a preflight, this is a suitable topic to begin with. The preflight is usually conducted with the airplane floating in the water, tied to a dock. Look at all the same items you are used to in preflight on a landplane, plus a few additional ones that have to do with the floats. To do a thorough preflight, you may have to turn the seaplane to position the wing or tail over the dock for inspection, as these parts may be over the water.

The floats are generally constructed of thin aluminum skin with a steel keel running their entire length along the bottom. The aluminum skin is delicate and should be inspected for damage.

The floats themselves are divided into several independent compartments, so that if a float is punctured, the water taken in will be contained to one compartment and not flood the entire float. While floats in good condition will take on little or no water at rest, it is normal for them to take in

some water during takeoff and landing when they flex and high water pressure pushes some water through the seams.

Each float compartment has a pumpout fitting built into it. Part of the preflight involves removing the plug from this fitting, inserting a bilge pump, and emptying each compartment of any water that has collected in it. These compartments and pumpout fittings are shown in Figure 1.

The floats are connected to the fuselage by struts, and connected to each other by spreader bars. This arrangement provides for strength, but is not inherently rigid. To maintain the alignment of the floats, the seaplane depends on two sets of flying wires that go between the struts. These should be looked at during the preflight to make sure they are tight. The front set of wires can be seen in Figure 1. All the attach points of the float struts and flying wires should be inspected for cracks and secure bolts.

At the rear of the floats are water rudders. These can be lowered into the water while taxiing at low speeds to help steer the seaplane, and should be retracted out of the water for takeoff and landing. They are connected to the air rudder by cables, such that they deflect in the same direction as the air rudder in response to pedal input. The cables go through several guides and pulleys; these should be checked to make sure that nothing will cause the cables to bind. While water rudders are not essential to safe flight, if the rudder cables bind, they can cause the air rudder to bind.

There is another cable used to retract the water rudders from their spring-loaded down position. This cable goes to the cockpit, and retracting the water rudders usually involves pulling this cable up and hooking it onto a bracket mounted on the panel. All water rudder cables are shown on Figure 1.

There will most likely be a paddle attached to the inside of one of the floats. Make sure it is secure and will not come off in flight. Also note how it detaches should you want to use it later. The paddle can be useful in everyday operations, such as docking, positioning the plane for engine starting, or maneuvering the plane through shallow areas.

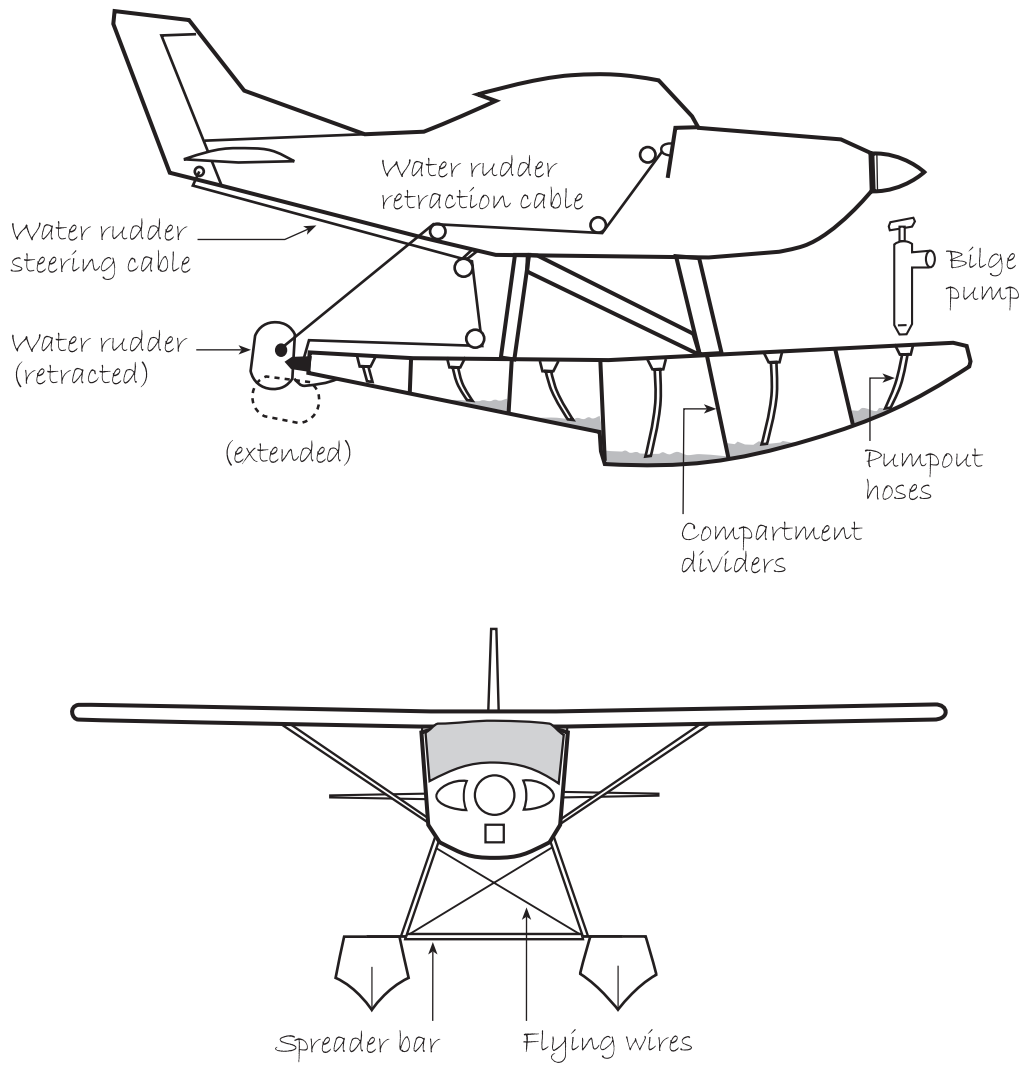


Figure 1. Line diagram of a floatplane



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What is it like to fly single-engine float planes? How do pilots develop and then hone their water-flying skills? What techniques apply to both landplanes and seaplanes, and which ones belong in only one realm? The answers to these questions comprise a unique approach to seaplane flying, in a book that reveals what floatplane mastery is really all about. *Notes of a Seaplane Instructor* offers insights to all pilots, from already-rated seaplane pilots to those looking to experience the benefits and pleasures of seaplane flying for the first time.

In these pages, readers will learn:

- How seaplane preflight inspections differ from those in landplanes
- Normal, glassy and rough-water takeoff techniques
- Flight characteristics of seaplanes
- Seaplane landing skills, in a wide variety of water conditions, and more.
- **Second Edition** includes discussion on multi-engine operations, pumping the floats, and notes on ropes and splicing.

Author **Burke Mees** has many years' experience with the demands and rewards of float-flying and seaplane instruction. From the diverse environments of flying seaplanes year-round in Alaska, to an extensive background of seaplane instruction, he has developed his talent for teaching the transition from landplanes to seaplanes. *Notes of a Seaplane Instructor* is a distillation of all the tips, techniques and procedures of a veteran flyer and teacher, in an accessible and informative format.



"Full of hard-won knowledge any seaplane pilot, novice or veteran, can learn from."

—Bob Reinaker

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