The Elusive Seaplane Rating

By Tad Jones

I am floating in my ski boat in a bay on a beautiful smooth blue lake. I am laying on my back and looking up at the sky, soaking up the afternoon sun when I see a pair of ducks flying low overhead. They glide over the bay and begin their circling descent towards the water. They begin their flare & touch down gracefully on the smooth glassy water. I am dreaming of flying on floats again.

The seaplane exemplifies the idea of adventure. I grew up waterskiing on Payette Lake in McCall, Idaho and started flying when I was in college. I always thought, "How fun would it be to combine both my flying and boating experiences together." While working my way through college at The University of Idaho in Moscow, Idaho I worked at the local airport, driving fuel trucks and plowing snow on the parking ramps to pay for school and flight training. The first seaplane that I ever saw was a "Lake Amphibian." The Owner would takeoff from the Moscow/Pullman Airport and land on the flat waters behind Lower



De Havilland Beaver docking in the San Juan Islands

Granite Dam on the Snake River. I thought to myself, "Wow! This is something I would like to do."



De Havilland Otter Plow Taxiing in the San Juan Islands

Fast forward a few years, my wife and I had just been married. On our Honeymoon we were driving along the Oregon Coast and we happened upon a seaplane Base in Florence, Oregon. We stopped in and the Owner/Operator offered to take us for a ride. It was super expensive for a young couple just being married. For a one-

hour flight it was \$120. The weather was very much "Oregon Coast Overcast" but the Owner said, "Yeah, in a seaplane we can fly really low and we can land anywhere there is water. It looks like it is clearing enough for VFR, Want to Go?" We were Ecstatic! Yes!



Tad Jones Holding the Dock Lines for a De Havilland Otter while the Pilot Prepares for Flight

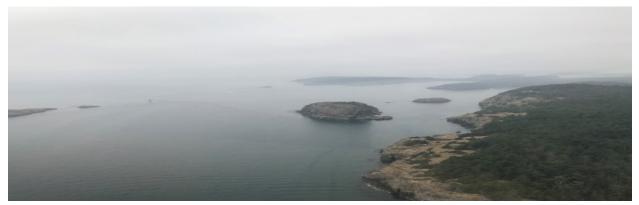
In 2018 for our anniversary my wife and I took a seaplane trip to the San Juan Islands with Kenmore Aviation and they let me ride along in the co-pilot seat. I was so impressed with how professional and competent the Pilots were and how willing they were to share their experience and knowledge. We were surrounded in the atmosphere of "real" seaplane pilots and the nostalgia of the planes that they so gracefully fly such as the Turbo Prop De Havilland Otter and the famous Rotary Engine Powered Beavers. During our trip to the San Juans there were forest fires burning in Canada and the smoke was limiting operations of other aircraft. The seaplanes flew

It was one of the most amazing flights. The pilot was one of the best. We flew low over the beaches to stay clear of clouds and then came in for a nice smooth landing on the fresh water lake where the seaplane base was located. The pilot described procedures and checklists the entire flight through. He showed us how he was reading the water and how to tell that he was landing into the wind and how he knew when to start his flare. I was absolutely mesmerized. I could not imagine a more beautiful thing. A human having the knowledge and ability to become airborne from water and then land back on water.



Tad Jones riding Co-Pilot with Pilot "Herb" in a De Havilland Otter Seaplane

low over the islands and waterways which allowed for a great view and kept them out of the smoke. It was reassuring to know that any waterway could be used as a landing area if needed.



Smoky Flying Conditions in the San Juan Islands

When we arrived in the San Juans we rented a land-based plane to fly around the islands. I had a local pilot and instructor fly with us to show us the many nuances of each of the airstrips on each island and describe to us much of the local aviation knowledge.



Renting a Land Based C-172 in Friday Harbor on the San Juan Islands. Instructor and Local Knowledge Tour Guide "Clyde"

After we returned home from the seaplane trip in the San Juans I began researching seaplane schools and signed up for seaplane training in Northern Idaho with Coeur d'Alene seaplanes. I soon found that obtaining my seaplane rating was going to be a test of time, waiting and patience. This rating has been the most elusive rating I have sought so far. The season is fairly limited in Idaho due to early winters and by the time I had decided on the school to use the season had been booked out for the remainder of the season so I made a reservation for the following year. For those of you that have gone through flight training you know there are many factors to having successful training days. Many flying days are subject to change due to

weather, instructor schedules, aircraft availability and aircraft maintenance. A seaplane is subject to all those same factors plus you also have to consider water conditions, boat traffic, visibility of power lines and a number of other factors. I decided to make the best of it and wait a year and use the extra time to study more about seaplane operations.

I was able to schedule my training for September of 2020. It turns out that was also to be the year of the pandemic. The school was still flying so we booked our reservations to camp at Farragut State park. This is right next to the seaplane base in Bayview, Idaho.

We packed up our Airstream travel trailer with over a week's worth of supplies and were getting ready to hit the road. Just as we were pulling out of our driveway I received a call from the owner of the seaplane school. Many new wildfires had started due to lightning strikes and were raging in Northern Idaho. They had called off all training due to TFR's and smoke. The owner said they were going to attempt to move the plane from Bayview to Priest River in an attempt to try to continue flight training. My wife & I looked at each other, the truck idling in the driveway. I had already taken the time off work; we had been planning the trip for over a year. We could both tell from the look in our eyes, "We were going!" It was going to be a fun trip even if I didn't get to fly a floatplane. As we were driving North, we got notification that they were considering evacuating the State Park where our reservations were located. We scrambled on our phones calling other areas to stay. No luck, everything was booked. At some point along our drive we received another notification that the winds had shifted and the fires were under control so the State Park would remain open until further notice. Thank goodness.

We arrived in Northern Idaho late at night. The smoke was thick making it difficult for our headlights to cut through the darkness. It burned our eyes and throats. We found our campsite and parked the Airstream and retired for the night hoping it would be less smoky in the morning.

We awoke to thick smoke in the trees. Visibility was just a hundred yards or so at our campsite. Not good for flying. I called the seaplane school and they said they had been able to move the plane before the smoke got too thick and it was located in Priest River, about a one-hour drive from the State Park. They also reported that the smoke had become much worse since transporting the plane, so training was off.

We figured since there would be no flight training we would enjoy the State Park. If you have never been to Farragut State park it is well worth the trip. It is beautiful. There



Smoky Conditions in Northern Idaho Prevent any Chance of Flying

are great trails for hiking and biking and it is along the shores of Lake Pend Oreille. The park was also a submarine base for the Navy in the past so there is a ton of history there too. Due to the smoke the park was not crowded at all which was also an unexpected treat.

So, each day went like this. I would text the flight school in the morning. "What's it look like in Priest River? -*Smoky* – *No flying this morning. Check back in the afternoon.*" In the afternoon I would send another text, "What's it look like in Priest River? – *Smoky* – *No flying today. Check back tomorrow morning.*" This went on for a few days and at least everyone was trying to make it work. The flight school and I discussed another option. I would drive to Priest River and at least get some ground school in during my trip. The DPE (Designated Pilot Examiner) was scheduled to leave town mid-week so we were getting to the point that I might only have one day to fly before taking my practical test. Hmmm, this is not looking good but we were going to give it a shot anyway.

I met my flight instructor Bob Del Valle at a small building at the airport in Priest River. Bob has spent over 17 years flying in Alaska and has been a search and rescue pilot since the mid 1990's. Right off the bat I knew we were going to get along great. He had a real mellow demeanor and also a depth that comes with many years of flight experience and teaching. We had a great ground lesson and I learned a ton in a short amount of time. We figured we would watch the weather for one more day but as we exited the building there was still thick smoke hanging in the air and we couldn't even see halfway down the runway at the Priest River airport. I drove back to Farragut State Park through the smoke thinking about all the items I had learned in the ground school session. So many stories with lessons that aren't in the books but come from years of experience. I thought to myself, "Even if I didn't get to fly or take my test it has been a great trip!"

The next morning, I woke up to more thick smoke. Our text exchanges continued throughout the day, *"Sorry, No-Flying."* This was the last day the DPE was available so the opportunity to get my seaplane rating was gone. It slipped quietly away as the smoke wafted between the trees at our campsite. I went for a bike ride around the State Park to soak it all in and think about options. All other flights had been cancelled with other students so I called the seaplane school to see if we could still possibly try to get some flights in over the next few days. I had reserved our campsite for three more days and might as well try to fly while I was there. They said that would be great if it worked out. Let's give it a shot!

I woke up the next day to thick smoke again. Same as before, "Sorry, No-Flying." By the afternoon it had started to clear a little. Let's shoot for tomorrow. I went for another bike ride. I biked up to an area where I could see the fire. It was smoldering and belching out plumes of smoke.

The next morning I received the text, "Starting to clear. We have 5mi visibility if you want to try." I loaded up my flight gear and headed to Priest River. Bob had the day off so I flew with instructor Kevin Heiss. Kevin gave me a quick intro to the plane and operations and checklists. He said we would be starting off in some of the most challenging conditions. We would be flying on the Pend Oreille River and not on the Lake. There was absolutely no wind so it was the dreaded "glassy water" conditions. Visibility had improved and it was actually more like 6 or 7 miles of visibility which was good, but there



Cessna 172 on Floats | Tad Jones Taxiing into a calm bay.

was a haze which would make determining our height over the water much more difficult. I learned how to idle taxi with the water rudders and we did that for a while. That was very instinctual from years of driving boats and flying but the seaplane is not a great boat so you definitely have to plan ahead. The seaplane is also very much like flying a taildragger in that it wants to constantly weathervane and turn into the wind. I soaked all of this in like a sponge. It felt so amazing to be taxing an airplane on water.



Tad Jones | First Floatplane Flight Lesson

Then we pulled the rudders up and practiced the plow taxi. Then Kevin demonstrated the first takeoff, how to get on the step, how to rotate one float out of the water and then pull the other float out of the water. It was amazing how "sticky" the glassy water felt. There was so much drag. He then demonstrated using the "Last Visual Reference" point (LVR) and then set up for a very slow and controlled descent until we just so slightly touched the water keeping constant power and pitch and without flaring. The glassy water was so sticky. It was like having "Velcro" on the bottom of the floats.

The friction of the water on the floats totally wants to nose the plane over and you have to pull back full aft elevator to keep that from happening. I was also surprised how fast we stopped on the glassy water. The deceleration was much more pronounced than in a land plane, even compared to a short field landing.

Next was my turn. I used the same last visual reference (LVR) point and set up for the super slow and controlled descent. It was so difficult to tell where the water was. I could not see the water below me and you are taught not to look down but to look out ahead of the airplane. I could have sworn we were still about 5 feet above the water when BAM!!...we totally smacked down. Some would think that water is soft but when you are traveling at 45mph with no flare in a slightly nose high attitude it feels as hard as concrete. We hit the water so hard that it knocked the GPS out. Seaplanes don't have the shock absorption of tires or struts so if you have a hard landing it is REALLY hard. Okay, take a deep breath and re-group. I had read about glassy water but I was not prepared for the realization of the actual situation. In glassy water landings you can see the reflection of the sky in the water and with the haze it made the reflection of the sky very much like flying in instrument conditions with no horizontal reference after the (LVR). I had read in my studies, "The mirror surface of the water will destroy your depth perception." Now it totally makes sense! Sometimes you have to experience the "real" situation instead of reading about it in books to fully understand it.



Tad Jones with the C-172 on Floats

We did a few more landings and after the first one it had "clicked" so the next few were much better and uneventful.

We flew out towards the main lake to find some wind. Kevin wanted to demonstrate rough water landings and techniques next. The waves were just barely starting to whitecap in some areas so we chose a spot without whitecaps and slowly set the plane down with the heels of the floats touching first. It was so much rougher that in a boat. When we landed it knocked the GPS out again from the smashing of the waves against the bottom of the floats. He then showed me a rough water takeoff, lifting both floats out of the water at the same time. This was very similar to a soft field takeoff where you lower the nose of the plane after getting the floats out of the water. You also have to be super careful that you have enough flying speed to remain in ground effect while increasing airspeed and not stall or sink back onto the water. A stall or touching back on the surface could be devastating in a floatplane. After taking off he said that was a little too rough so we headed back inland a ways to find some water that wasn't quite as rough so I could practice the techniques.

After I had become proficient in rough water landings and takeoff procedures we went and did some confined area landings and takeoffs and then some spot landings. That part was super fun. I liked the challenge of trying to land at a designated point.

We chose a point off the end of a dock where there were no boats and the water had small ripples on the surface. The ripples allow the pilot to see the surface of the water and it simplifies the landing process to adjusting power settings and choosing points in the "pattern" to initiate turns, and then just timing the flare and then touching down on the water at the chosen point.

Takeoffs are also so much easier with ripples on the water surface as it allows the floats to break free of the water's surface tension much easier. We flew back to home base and did one more "glassy water" landing before tying up the plane to the beach. What an amazing feeling to have flown a floatplane!

The next morning was clear enough to fly again and this day I was able to fly with Bob. This was one of the best days of instruction I have ever had. Bob was cleaning the plane when I showed up in the morning and asked if I would like to help clean the plane. I was like, "Sure!" So we went to work cleaning off bugs and getting the plane ready. As we cleaned the plane we talked about what I had learned the day before with Kevin and we reviewed some of the items that we had discussed in ground school. We did our pre-flight which is a bit more different on a seaplane. It takes balance and coordination to not fall in the water when checking the fuel and doing your "walk-around". He showed me how to pump out the floats and how to turn the plane around and set up the water rudders. Then we fired it up and idle taxied out to the river.

The water was "glassy" again but this time I was more prepared. I told Bob about my first "glassy water" landing and he said that it can be pretty common to touch down on the water before you are expecting to when first learning glassy water. He had some suggestions that we worked on together. Bob would have me choose an LVR that was much closer to my touchdown point and he wanted me to be much closer to the water when I was above the LVR. He had me shoot for about 10' above the LVR if possible. That tip made it so much easier to land on glassy water.



Edo 2000 Aluminum Floats

We did much more of the same training that I did the day before, but I was so much more comfortable in the plane. Using knowledge from the previous day's lessons made it much more enjoyable. We found a couple islands to land between and that was just spectacular landing between two islands and watching the shoreline slide by as we did a couple takeoffs and landings there. Bob then showed me how to fly in low over trees and then drop the plane into a bay which can be helpful if you have a smaller lake or body of water you are landing on. I was so glad that I had my previous backcountry training as this was very similar to a short field landing with tall trees at the end of a runway. I did a couple landings over the trees into the small bay and it was absolutely amazing!

At one point in the flight Bob said, "Let's taxi over to the edge of this bay and turn off the engine and see what the wind is doing." It was really light wind and it was a bit swirly so maybe we were doing a check on the wind, but I suspected that he was planning to teach me something else about float flying.

We turned off the engine and just floated on the smooth water for a few minutes, neither of us saying a word. The silence was a stark contrast to the roar of the engine, the buzz of the propeller and the adrenaline associated with pushing yourself to your limits. I enjoyed soaking up the simple fact that we were floating on the water in an airplane. The water was so quiet and still. Just then I heard a loon make its distinctive call. Like a musical instrument echoing over the smooth water with a haze of smoke floating above the surface. I put my hand out the window and I could feel just the slightest breeze. It



Alaskan Bush Pilot and Seaplane Instructor Bob Del Valle (Left)

allowed me to determine the direction of the wind. Bob showed me how to "sail" the airplane using only the ailerons and rudder. It was amazing how maneuverable the airplane was in the light breeze without the engine running.

I think Bob was also showing me how special float flying can be and how lucky we are to be Aviators in this day and age. Sometimes you learn more from silent and peaceful reflection than from books, charts, and roaring engines.

Well, roaring engines are fun too, so we fired it up and pushed the throttle forward. Gaining speed, we lifted the floats off the water one at a time and climbed back skyward. We did a few more landings and then circled over home base. There were just small ripples on the water's surface and we made one last perfect landing. We taxied back into the bay and turned the engine off and floated to shore. We fueled up the plane for the next flight and then de-briefed. What an incredible day!

I learned so much in the limited days that I got to fly on floats. It was totally worth waiting it out. Was I disappointed that I didn't get my rating...sure, but flying is a lot more than just obtaining ratings and I know I will learn even more on the next flight. It also gives me the opportunity and motivation to fly floats again and learn even more. Would I recommend float flying to other pilots, Absolutely! It is an absolute incredible experience. The ability to land and takeoff from water provides so much freedom. The possibilities are endless. Some think of this rating as something you get and then hang on your wall. I have heard this so many times. I think of it as one more tool to have in your tool bag. It is one more opportunity to learn something new.