

Staying Safe flying over Western Washington in Single Engine Aircraft



An issue that is often overlooked by pilots in Western Washington is an emergency landing location in the event of an engine failure.

Western Washington is particularly challenging as most areas are mountains, trees and water often providing little in the way of emergency landing spots.

Engine Failures

Although engine failures are rare, they do happen. Some causes of engine failure include:

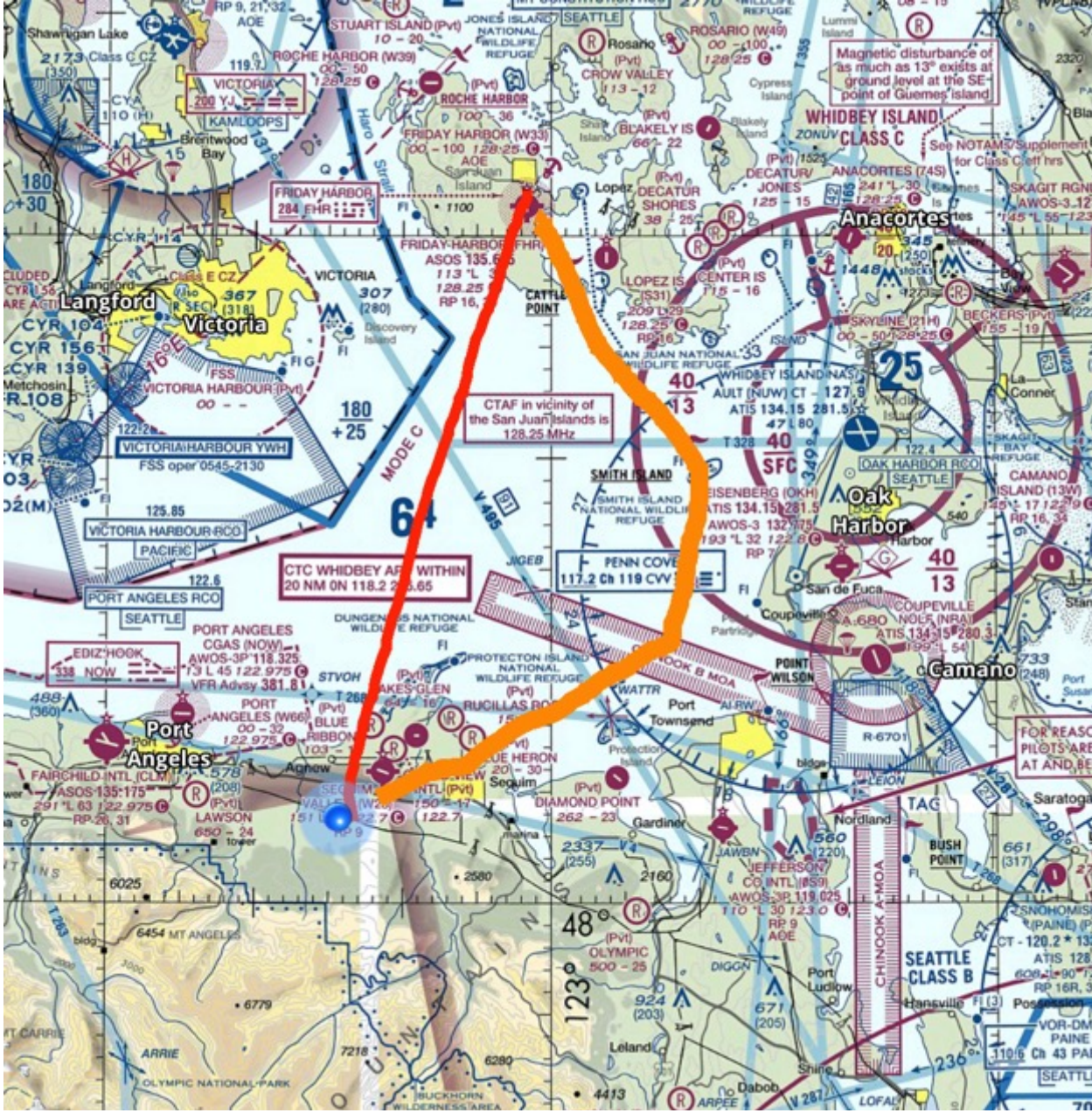
- Fuel contamination
- Fuel Starvation
- Fuel / air mixture issue
- Carburetor ice
- Component failure
- Loss of oil pressure

Overwater Engine Failure

(Example – flying between Sequim and Friday Harbor)

Pilots should fly high enough over the water so that if their engine fails, they can safely glide to the shore. Unless you are in a float plane, an emergency water landing will likely be fatal due to impact with the water, cold water temperature quickly causing hypothermia and death long before search and rescue arrives.

This map shows a direct route for crossing the Strait in red. A typical plane flying over the middle of the Strait experiencing an engine failure at 5000 feet can likely glide to the Dungeness Spit going South or Cattle Point on San Juan Island going North. A lower route at 2500 feet might be safely flown as shown in orange flying near Protection, Whidbey and Smith Islands. Glide distances vary with different aircraft. Knowing your aircraft's engine out glide speed and distance will result in a much higher safety margin and peace of mind.



Additional Considerations:

Flying high enough to glide to an airport in the event of an engine failure is always the best course of action. Pilots should always have a plan for landing in the event of an engine failure in mind at all times during their flight.

Often survivable, but less desirable emergency landing spots might include:

- Beaches (at low tide)
- Fields
- Open flatter ridge tops (mountains)
- Logging, service roads (stumps and curves hazard)
- Highways (if no traffic is present)

Landing in the trees is likely to be fatal

Night flying presents even bigger challenges with the only safe landing spots being airports with lighted runways. Brighter moonlit nights might also provide some additional limited options

Pilots number one priority should always be safety for their passengers and themselves. A thorough preflight, weather briefing and plan of action for emergency situations including engine failures is essential.