

Multi-Engine Private: Questions and Answers

Is a Multiengine Aircraft safer than a Single Engine Aircraft?

Muti Engine Safety Math

Per flying hour a Twin Engine Airplane compared to a Single is:

- 2 times more likely to develop problems in ANY of its engines;
- 4 times less likely to develop problems in TWO of its engines.

Surprisingly safety doesn't improve significantly with 3 or 4 engines. A dual failure in the 3 engine types usually creates an unacceptable loss of performance. In the 4 engine types a dual failure on the same side creates a directional control dilemma.

Two engines are better than one, but ...

How about Basic Training and Proficiency?

Incompletely trained or rusty pilots can fly multi engine airplanes, but not safely. In normal operations they would be at least twice safer flying a single engine airplane. This is due to the higher probability of any of the engines failing in a multi and the consequences of not being prepared to handle those cases.

How about flying over water or at night?

Long over water flights are safer in multi-engine airplanes, but only with proper preflight planning. The pilot needs to make computations which prove that, in case of an engine failure, enough range is available to reach the destination, the departure, or the alternate airport. The computations should assume the worst possible moment for engine failure - the equal time point - and take into consideration existing winds and temperatures. The same applies for night flying.

Is the Seneca I a High Performance aircraft?

Not anymore. The FAA changed the rules a while ago. Since the Seneca I has 2x200 HP engines, it is NOT categorized High Performance. The Seneca III however with the 2x220 HP is.

How about the critical Engine?

Our Senecas don't have a critical engine because they have counter-rotating propellers.

Can I rent a Seneca after completion of my Multiengine License?

Yes for flying within the USA you can. For flying out of the country some minimum pilot requirements apply. For more details check out the Insurance Section.