

AVIATION RISK ANALYSIS



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TEAM




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AGENDA



Business Overview



Business Problem



Data Overview



Recommendations



Future Insights

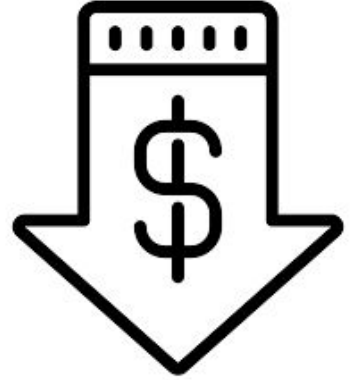
FINDINGS

- ✈ TurboProp Single Engines are 15x safer.
- ✈ Quest makes the safest models of TurboProp Single Engines.
- ✈ They also represent less economic risk when entering a new market.



BUSINESS OVERVIEW

- ✈ With a \$5 million budget, our mid-size company aims to serve corporate and private enterprises, specializing in smaller group operations.



BUSINESS PROBLEM

- ✈ Address high airline fatality and serious injuries.
- ✈ Identify safe airplane options across different types.
- ✈ Deliver invaluable insights on the world's safest budget-friendly airplanes.





DATA OVERVIEW

The National Transportation Safety Board:

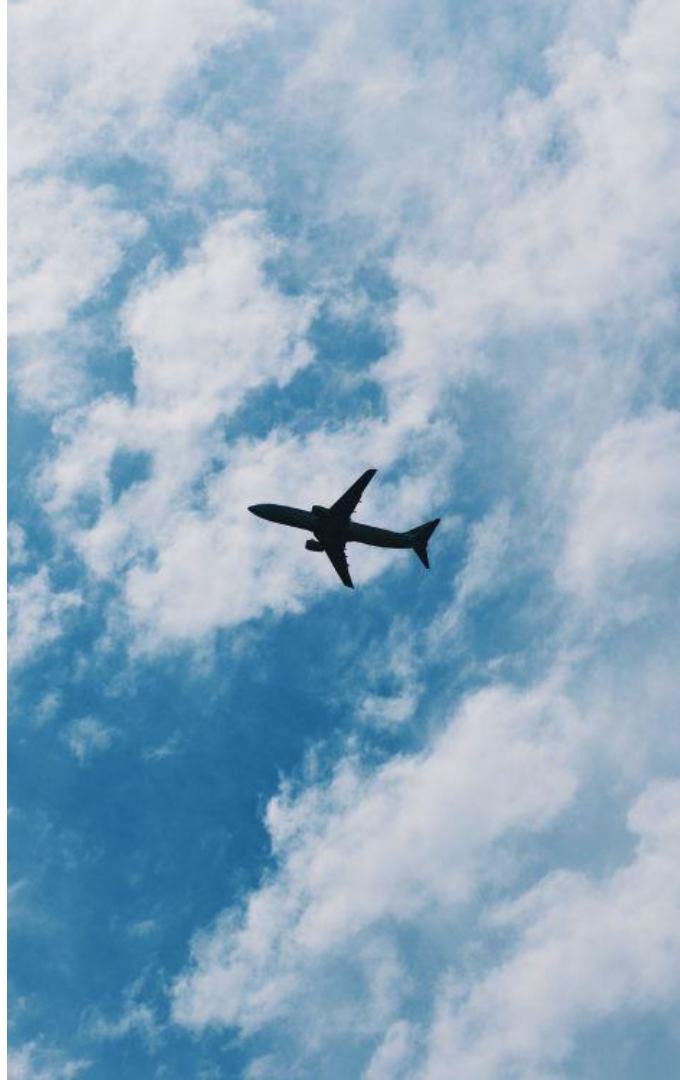
Aviation accidents from 1962 to 2022

Filtering:

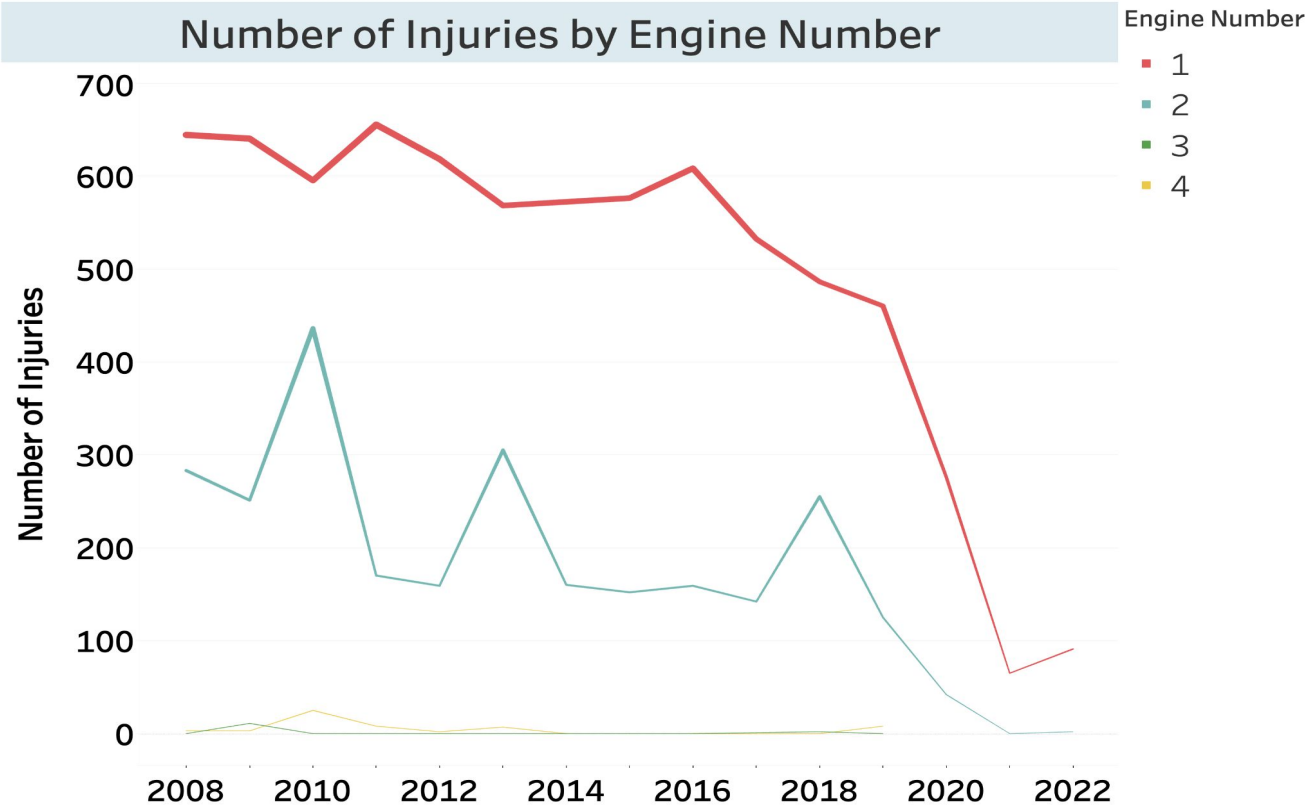
- ✈ Airplanes only
- ✈ Professionally built
- ✈ 2008-2022
- ✈ Serious and fatal injuries
- ✈ 14,100 datapoints

DATA LIMITATIONS

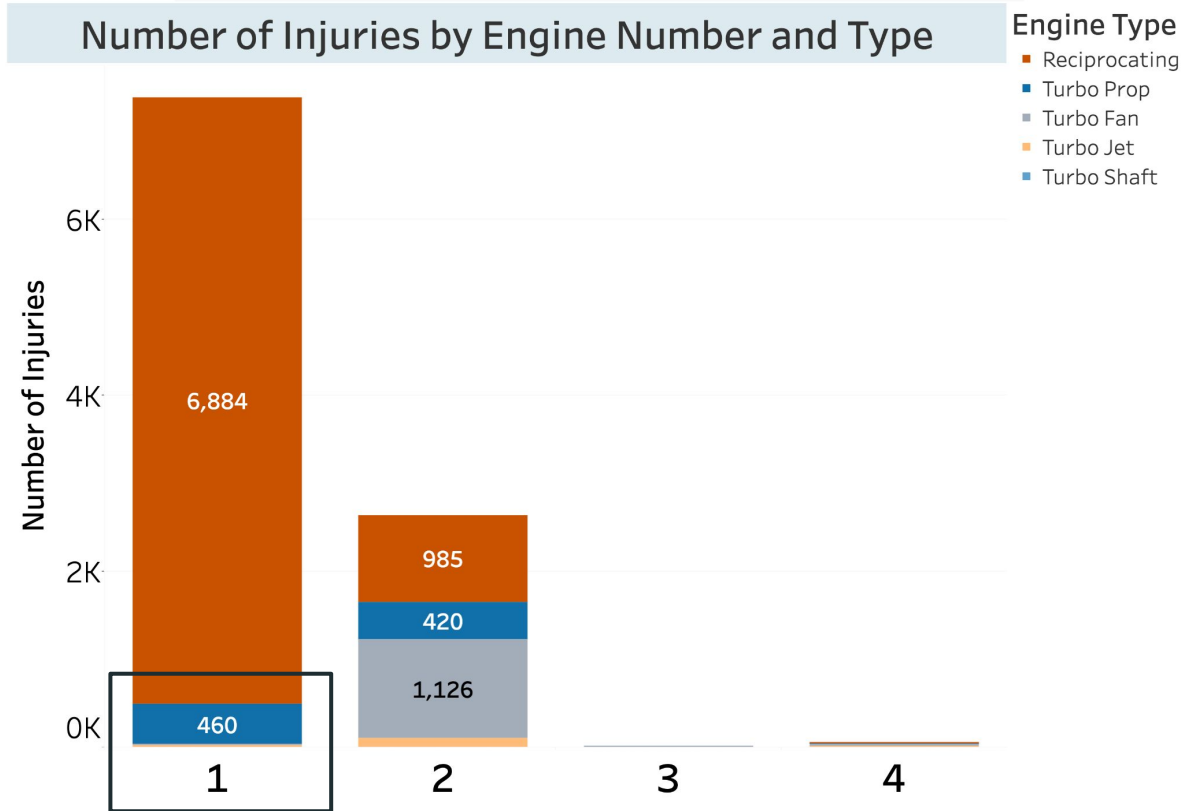
- ✈ No records on annual flights or make releases.
- ✈ The reason of accidents are not specifically clear
- ✈ Inconsistent reporting in terms of aircraft category.



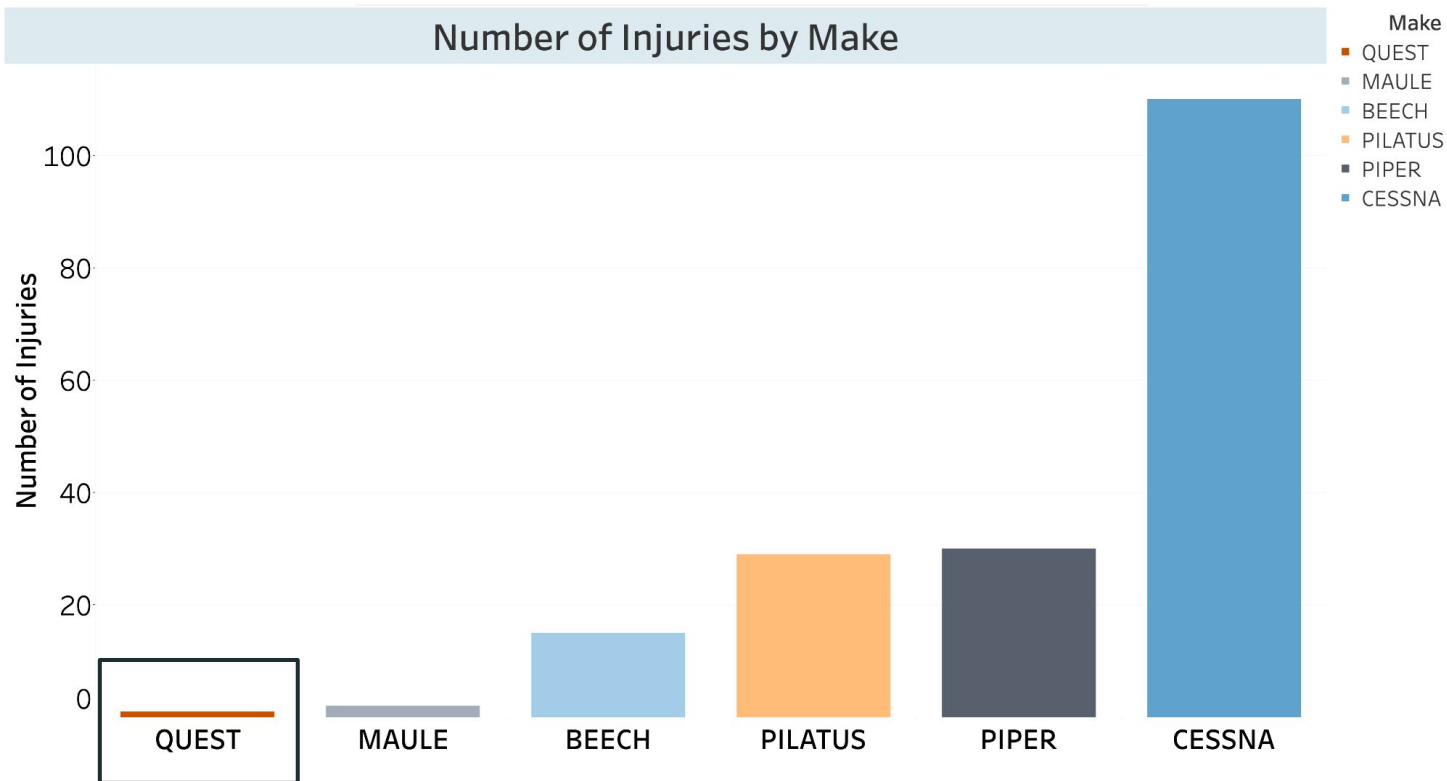
Single-Engine Airplane is Riskier



TURBO Prop is safer than Reciprocating Engine



QUEST is the Safest for Single Turbo Prop Airplane



RECOMMENDATION



✈ Reciprocal engine models are dangerous and dated.

Avoid them.

✈ Turbo engines are involved in 15x less accidents.

TurboProp is safe and cost-effective.

✈ Quest is the safest leading manufacturer of single TurboProp engine planes.

New models retail at \$4.5m

QUEST TBM 960



FUTURE INSIGHTS

- ✈ Look into industry norms, like leasing planes.
- ✈ Analyze comprehensive flight data, such as total number of flights.
- ✈ If this venture proves successful, expand budget and look into planes with two or more engines.

QUESTIONS?



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SOURCE

How much Do Airplanes Cost:

<https://pilotinstitute.com/how-much-do-airplanes-cost/#:~:text=General%20Aviation%20Airplanes%3A%20%24100%2C000%20-%20%241%2C000%2C000.%2480%20million%20-%20over%20%24200%20million>

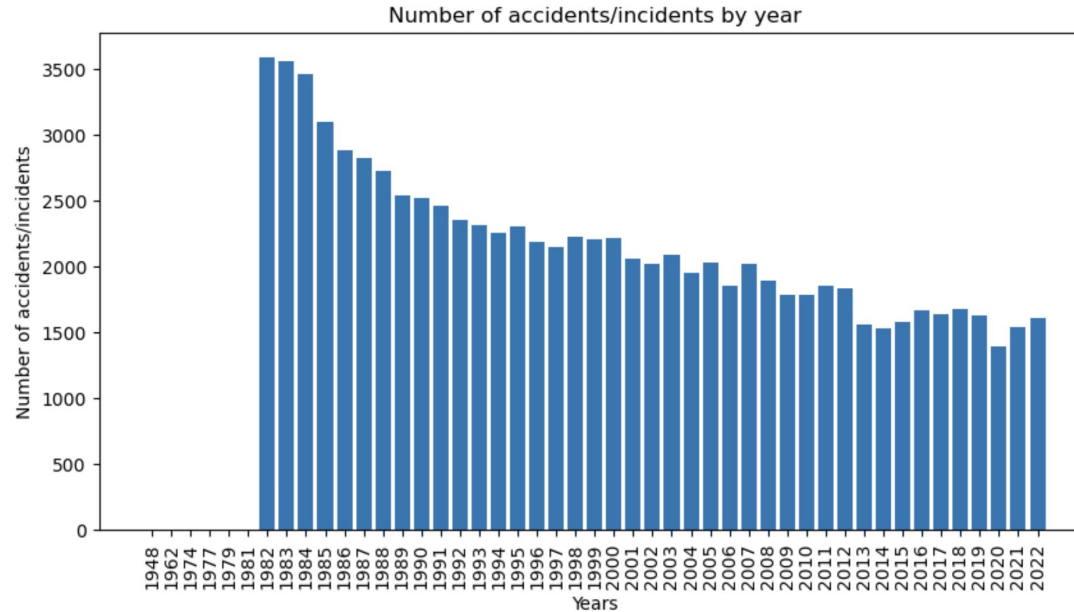
Piston vs. Turbo: <https://www.mercuryjets.com/piston-vs-turbo/>

ChatGPT

Leasing Planes: <https://simpleflying.com/how-airlines-pay-for-planes/>

APPENDIX

Number of accidents



APPENDIX

Number of accidents of Airplane

