

Presented by Connor Anastasio

Aircraft Analysis

Low-risk Aviation Investment

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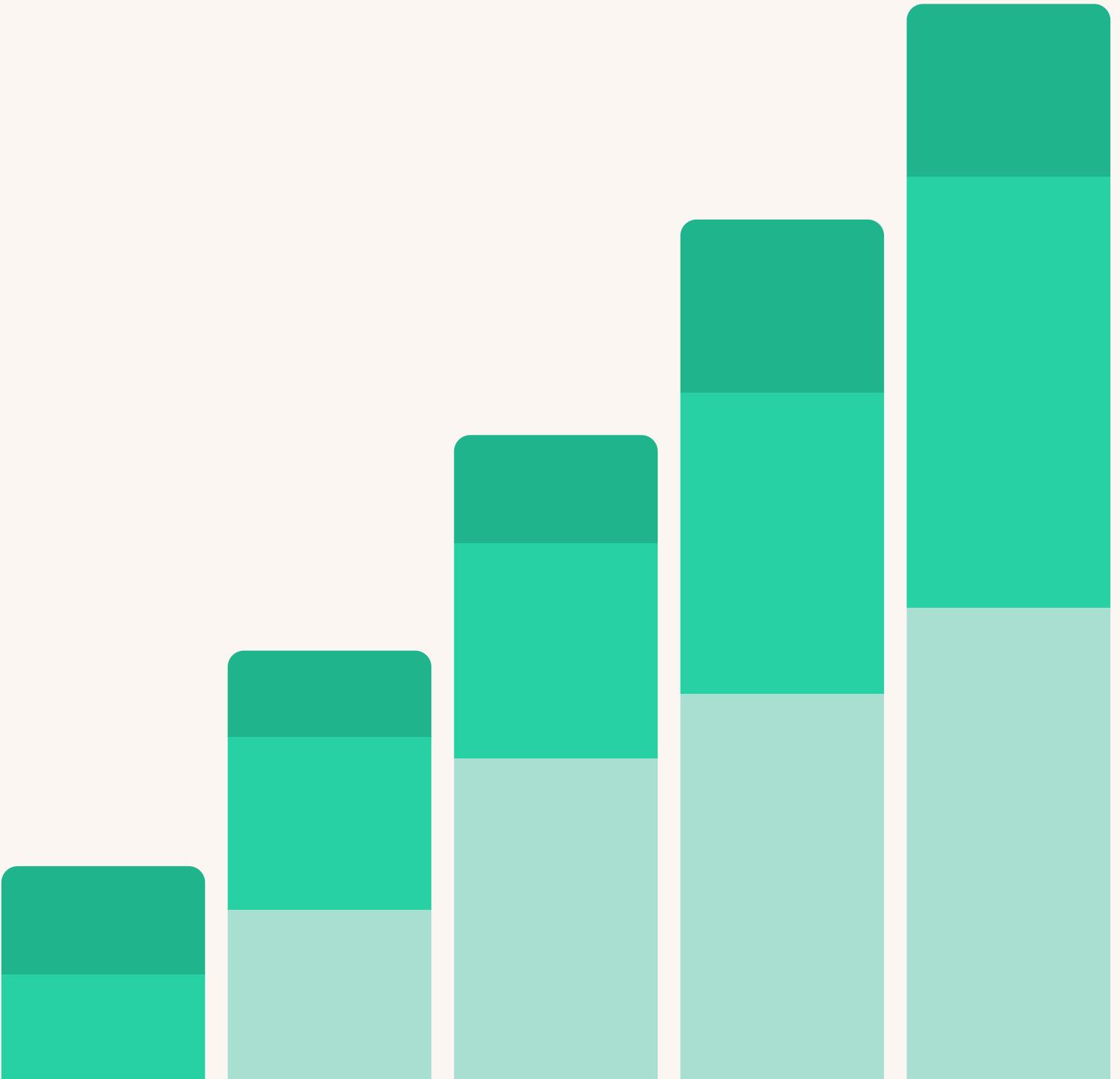
Summary

Analysis of aircraft accident data has yielded several insights for lowering investment risk:

- In terms of overall safety rating for investing, single engine planes should make up the majority of investment.
- Investing in a single, well-known company may be a safe approach to start with. Cessna is a great choice, as our dataset has provided ample information for model choices.
- Avoiding routes with poor visibility and providing further training for pilots to deal with adverse conditions would likely aid in reducing accidents and profit loss.

Outline:

- Business Problem
- Data & Methods
- Results
- Conclusions





Business Problem

- Identify aircraft accident risk factors
- Find the safest aircraft makes and models to invest in



Data & Analysis

Data

We will be using the publicly available Aviation Accident Data from the United States National Transport Safety Board. It contains very detailed information about each occurrence, including flight information, weather, purpose of flight, and time of day.

Analysis

We will be eliminating unpredicatable information from the dataset when possible. This approach will enable investors to make informed decisions about what they are investing in. Additionally, the weather conditions of flights will be evaluated.

Results

01.

Single Engine Planes have the lowest injury rate per accident, based on our dataset.

02.

Cessna has the most injuries, but by far the most occurrences, making it a much lower risk investment than it appears to be.

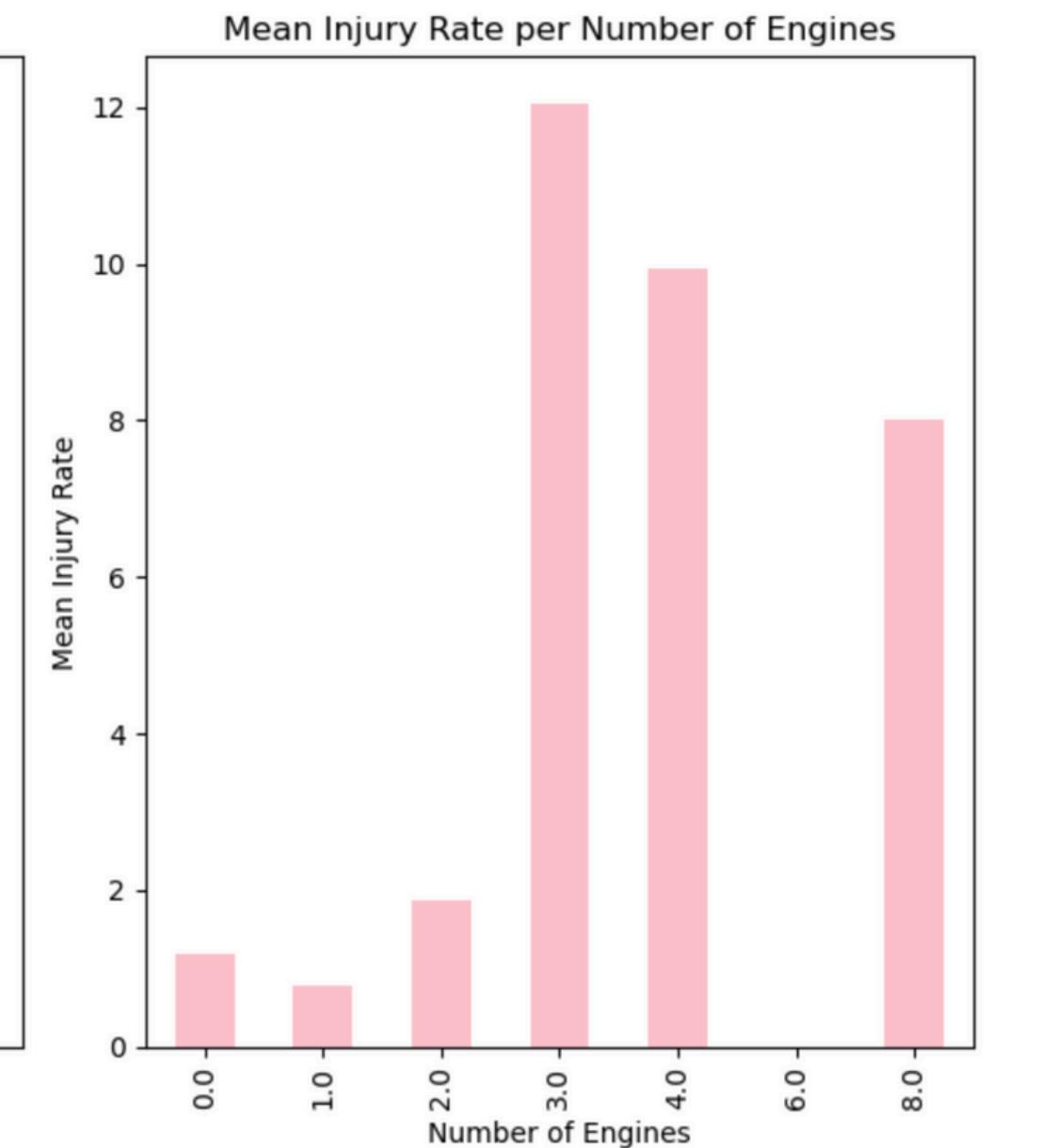
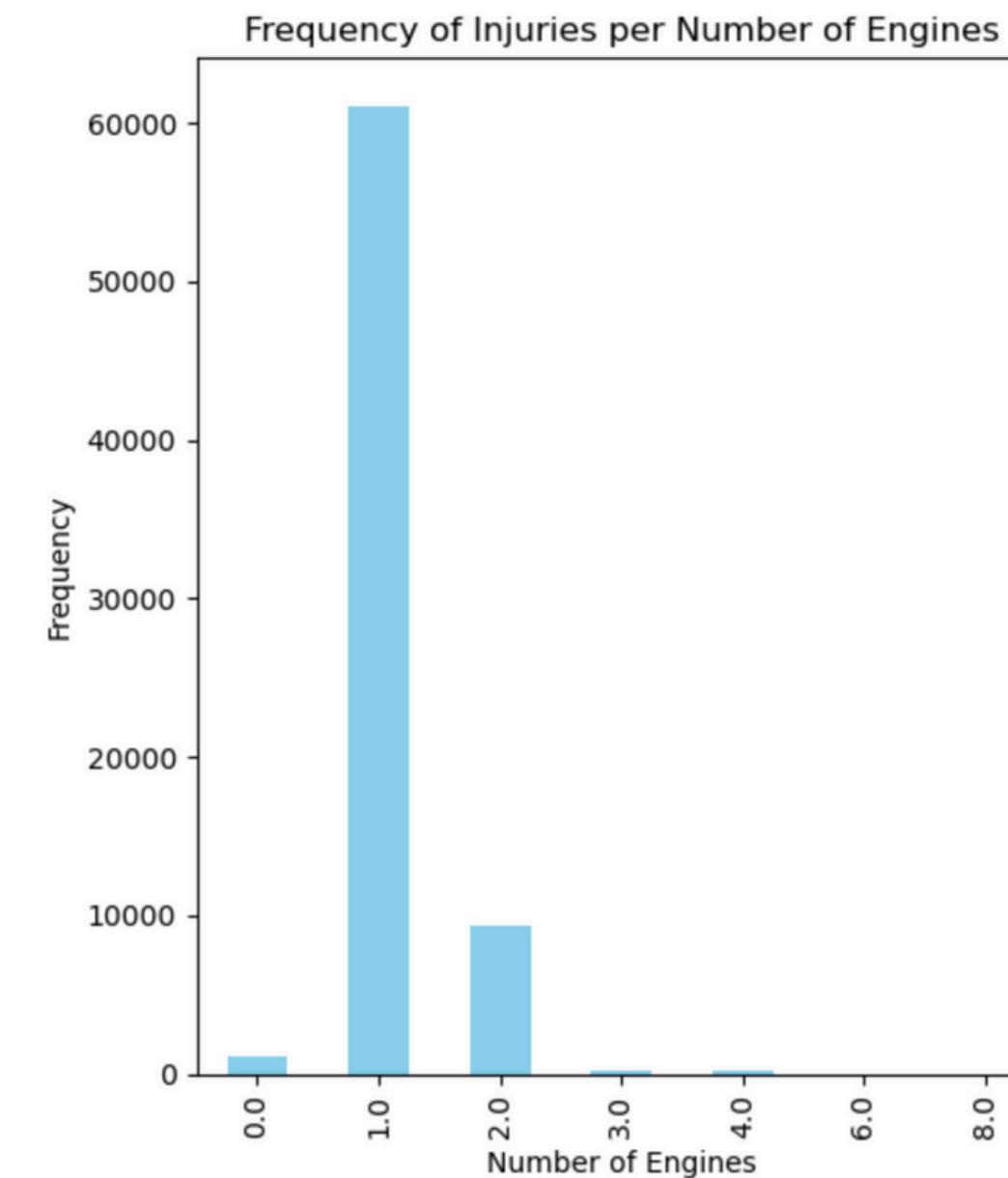
03.

Adverse Weather and poor visibility conditions increase the likelihood of accidents and fatalities.

Results

01.

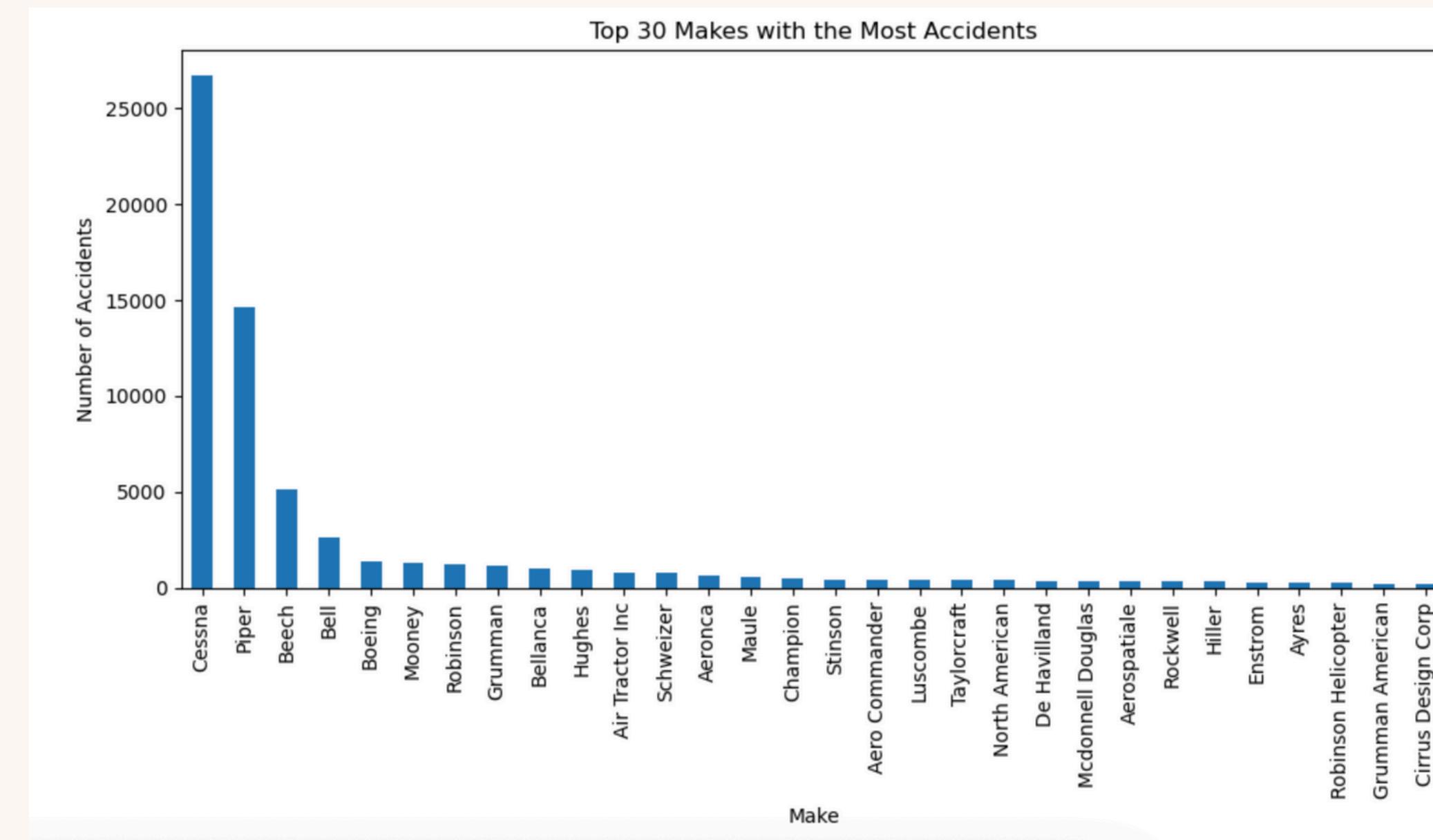
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02.

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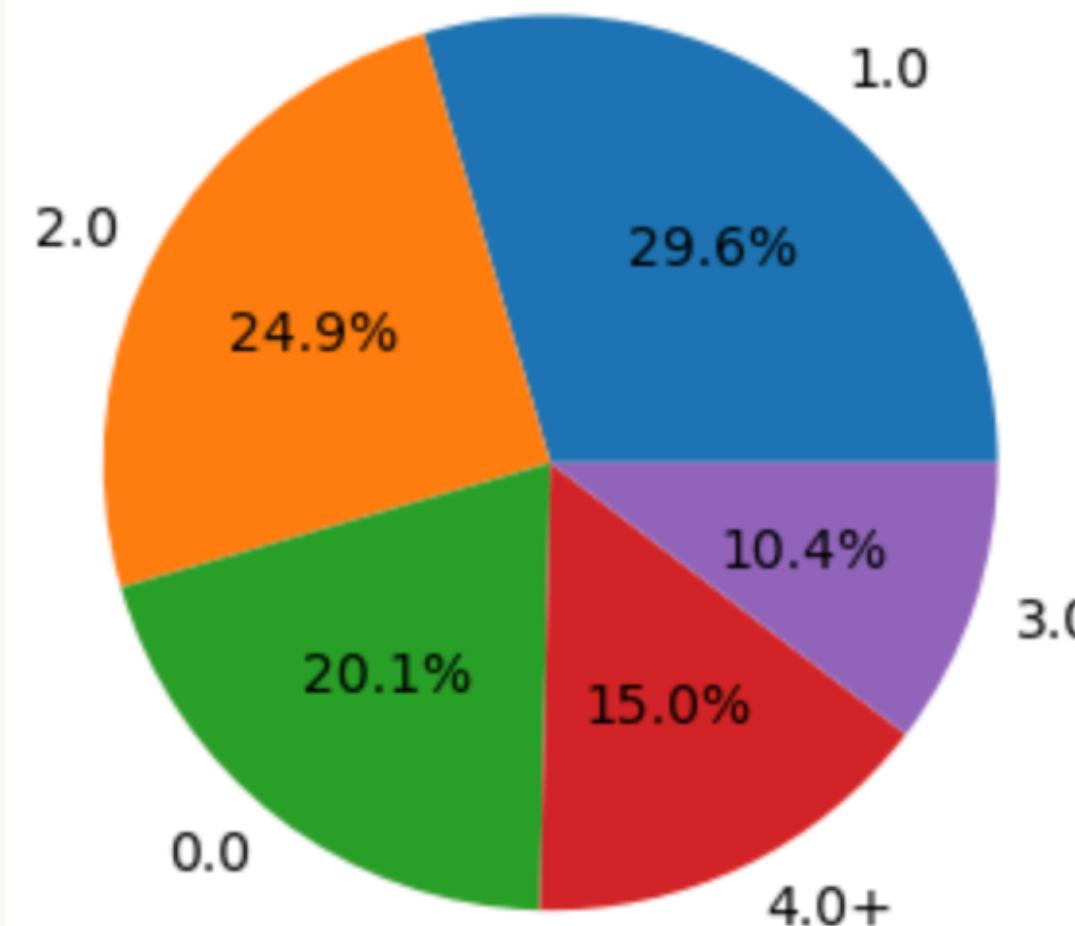


Results

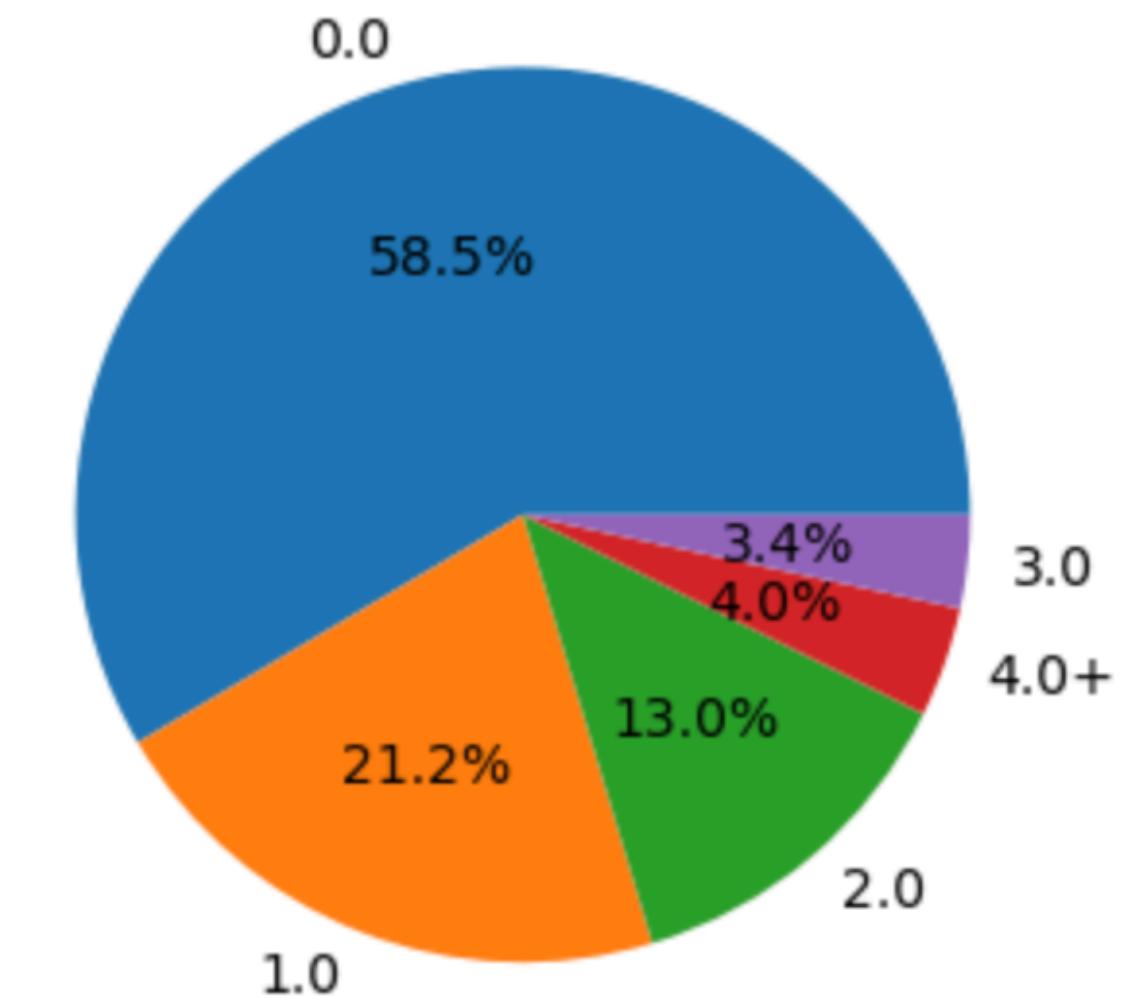
03.

Adverse Weather and poor visibility conditions increase the likelihood of accidents and fatalities.

Fatalities with Poor Visibility



Fatalities with Clear Visibility



Note: The percentages are the proportion of accidents, and the numbers are the individual fatalities

Conclusions

01.

In terms of overall safety rating for investing, single engine planes should make up the majority of investment.

02.

Investing in a single well-known company may be a safe approach to start with. Cessna is a great choice, as our dataset has provided ample information for model choices.

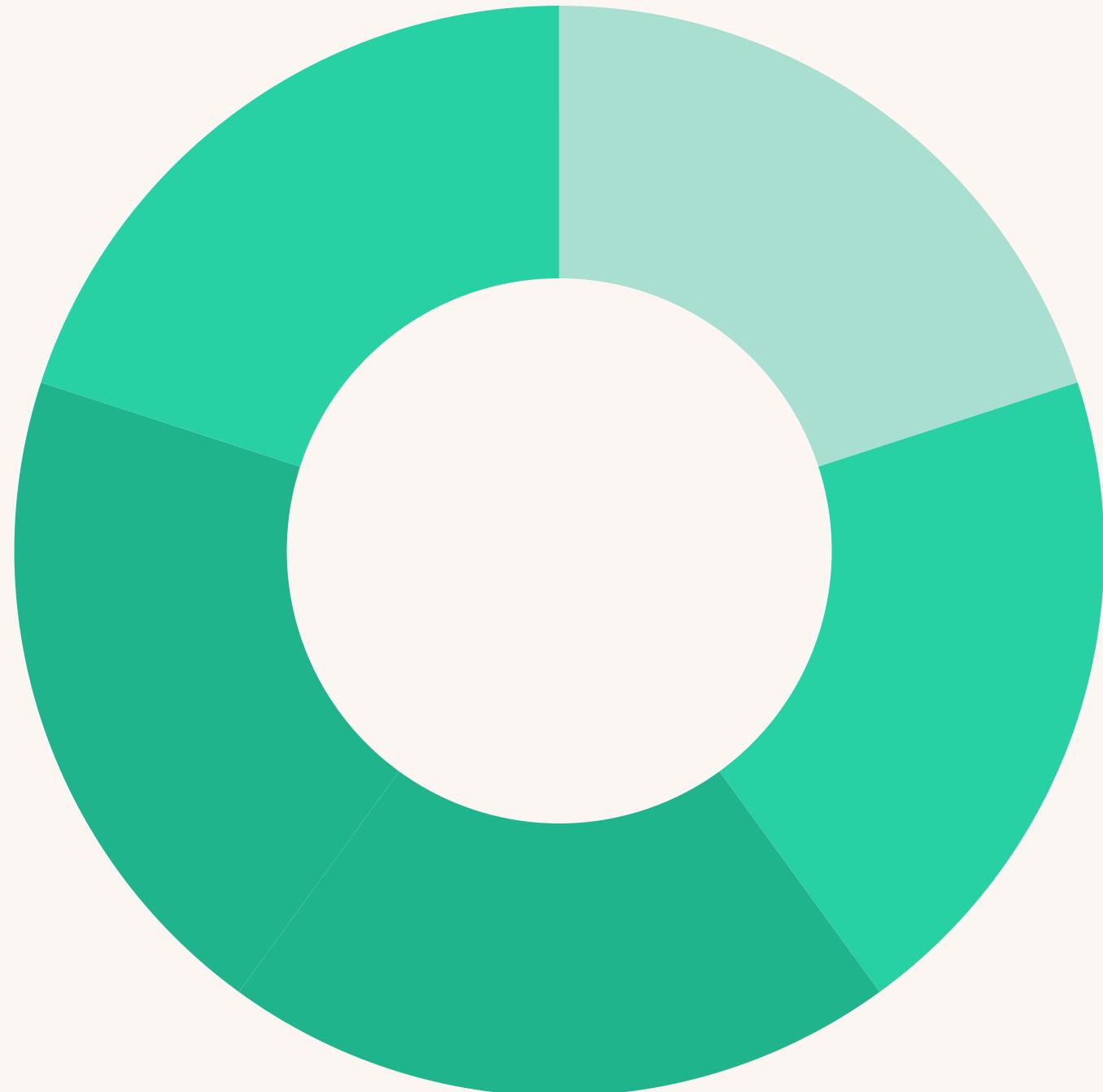
03.

Avoiding routes with poor visibility and providing further training for pilots to deal with adverse conditions would likely aid in reducing accidents and profit loss.



Future

- Compare cost of the safest aircraft models to determine which can bring the largest return on investment
- Gathering data on Aircraft sales and in-use data for individual aircraft would allow us to make more informative individual model recommendations



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Thank you very much!

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