

Phase 1 Project

Aviation Data

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[GitHub link](#)

[Tableau link](#)

Summary

The goal of this project is to look at aviation accidents that occurred in the past years from 1962 to 2022. The purpose of this analysis is to allow our clients make informed decisions on what aircraft to purchase.

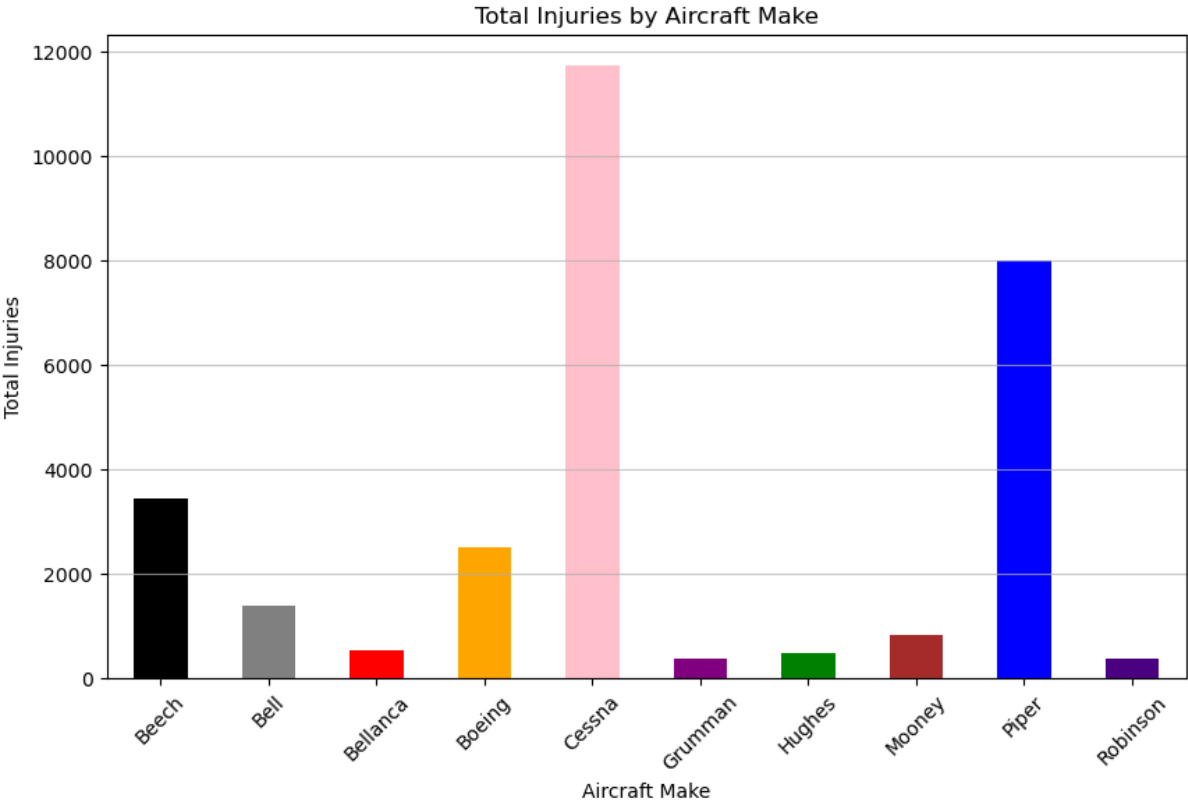
Exciting findings from the data include:

1. The US has most of the reported aviation accidents.
2. Cessna is the aircraft make with the most accidents. This is also linked to the fact that it has the highest number of personal flight users.
3. Top 3 aircraft with the most accidents are: Cessna, Piper and Beech.
4. Boeing is the safest aircraft for business flight.
5. Grumman is the safest aircraft for personal flight.

Business Problem

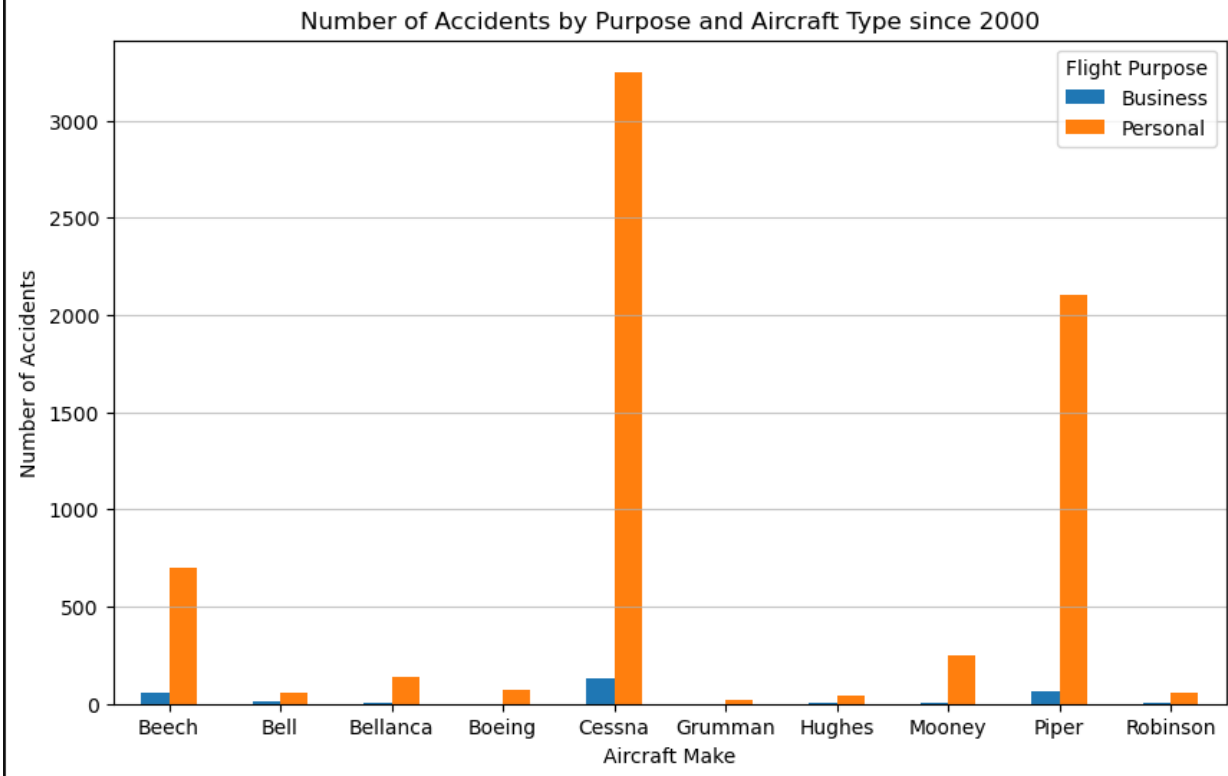
Advice a potential client on the safest aircraft.

Results



Cessna has the highest number of injuries by aircraft make.

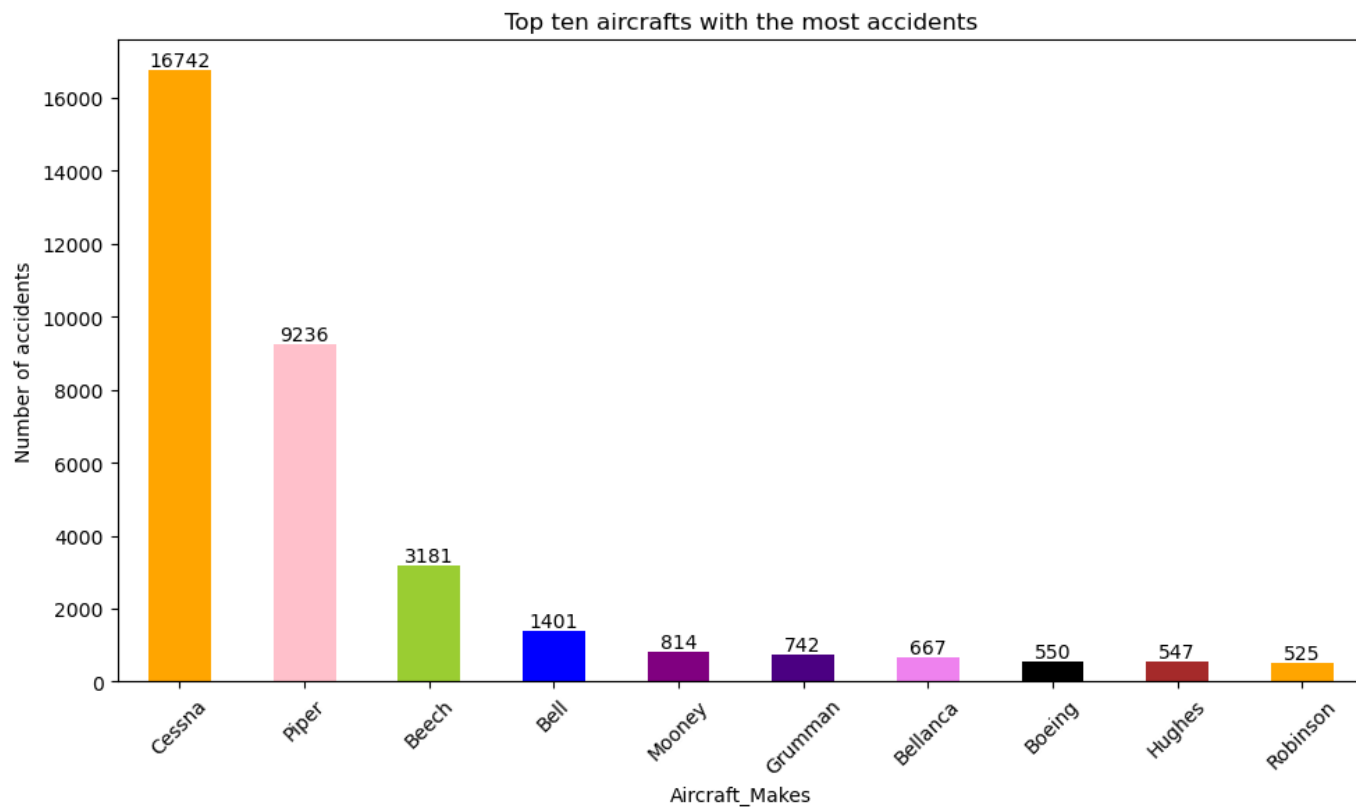
Results



It is advisable to fly business since these are normally safer.

Cessna aircraft have the highest number of accidents under personal use terms.

Results



Cessna aircraft are seen to be the most involved in accidents.

Results

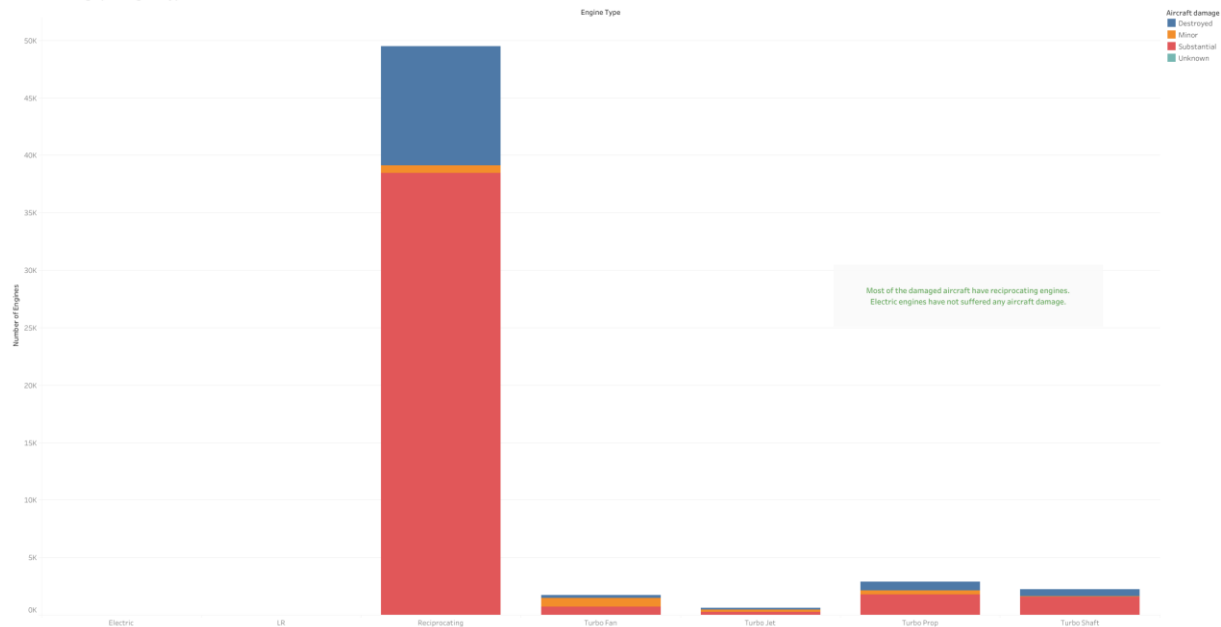
Total Global fatal injuries in the year 2022



In the context of viewing aircraft fatal injuries, USA leads.

Results

Aircraft Damage per Engine Type



Reciprocating engines are the most likely to have aircraft damage. In contrast, electric aircraft aren't.

Results



There has been a steady decline in the number of injuries per year all across the years. In 2022, we saw shift in statistics where the number of fatal injuries were significantly less than minor injuries. Meaning, the skies have become safer and in case of any incident or accident, one is more likely to sustain very minor injuries.

Conclusions

Cessna, Piper and Beech aircraft are prone to the highest accidents and injuries. However, this is mostly with aircraft used for personal flight and can be attributed to various other factors.

For business and personal flight, the safest aircraft to go for is Boeing and Grumman respectively.

There has been a steady decline in aircraft injuries through the years and in 2022, the number of fatal injuries dropped significantly to the tens.

Thank You!