Taking Flight

JZ Flight School Analysis

Summary

Key findings:

- Cessna, Bell, and Piper aircrafts are the safest airplanes.
 - O Cessna 172, Cessna 158, or Piper PA-28
- Most dangerous flight phases: initial climb, cruise, and maneuvering
- Most dangerous time of year to fly: winter

Outline

- Business Problem
- Data & Methods
- Results
- Conclusions

Business Problem

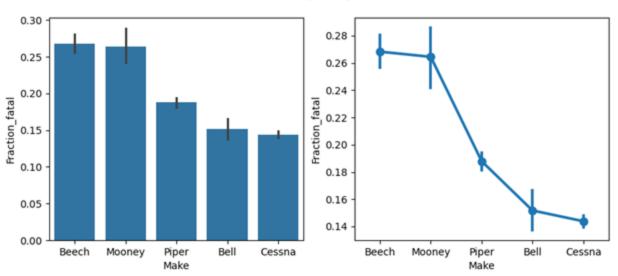
- Determine the safest plane models to purchase for instruction.
- Determine the most dangerous flight phases.
- Determine the most dangerous seasons for flying.

Data & Methods

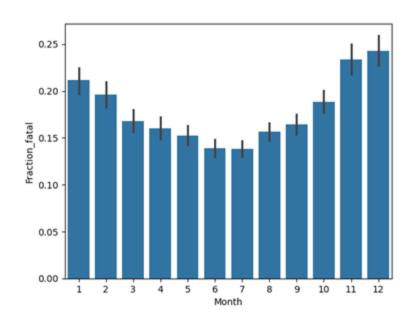
- Safety Metric: Protecting passengers during an accident
 - Fraction of passengers killed during an accident.
 - Fraction of passengers injured during an accident.
- Focused on smaller aircraft

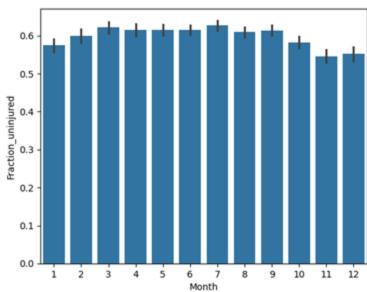
Cessna and Piper have the best safety metrics.

General Survival Rate per Popular Manufacturers

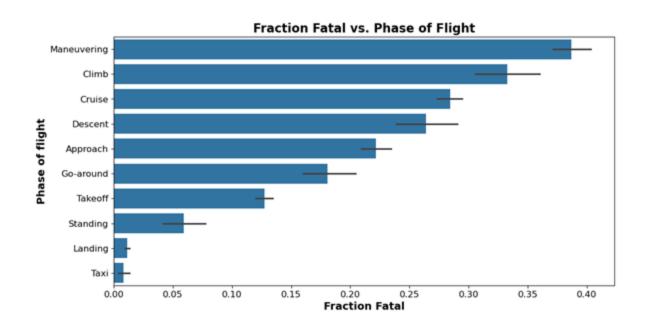


The winter months are the most dangerous for flying.

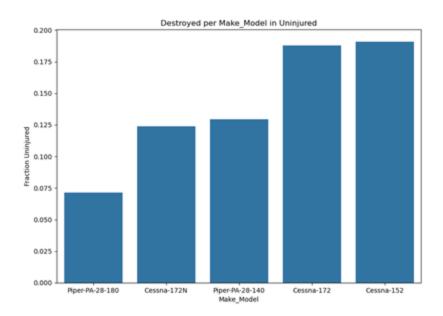




The initial climb, maneuvering, and cruise phases are the most dangerous.



The Cessna 152, 172 and the Piper PA-28 are the safest models.



Conclusion

- Consider Cessna or Piper makes (Cessna 172, 158, or Piper PA-28).
- Focus on safety during climb, cruise, and maneuvering phases of flight.
- Focus on safety during winter flying.

Next Steps:

- Investigate the geographical locations of accidents to gain insight.
- Investigate weather conditions.

Thank You!

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