
Taking Flight

— JZ Flight School Analysis —

Summary

Key findings:

- **Cessna, Bell,** and **Piper** aircrafts are the safest airplanes.
 - 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

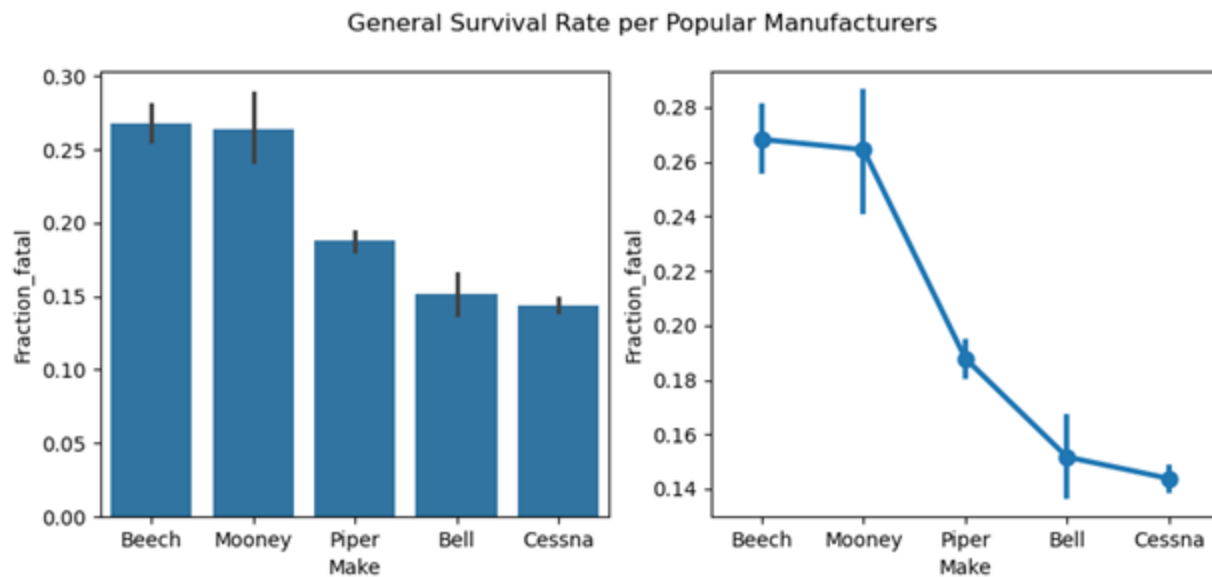
- Determine the safest plane models to purchase for instruction.
- Determine the most dangerous flight phases.
- Determine the most dangerous seasons for flying.

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

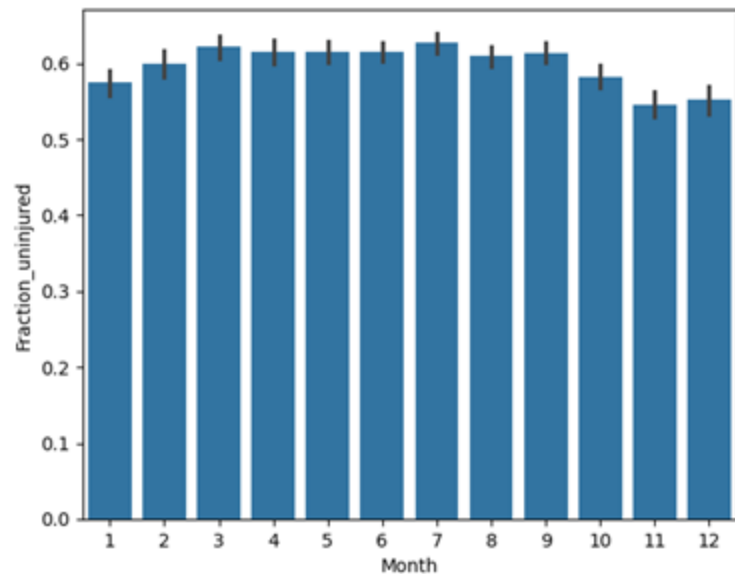
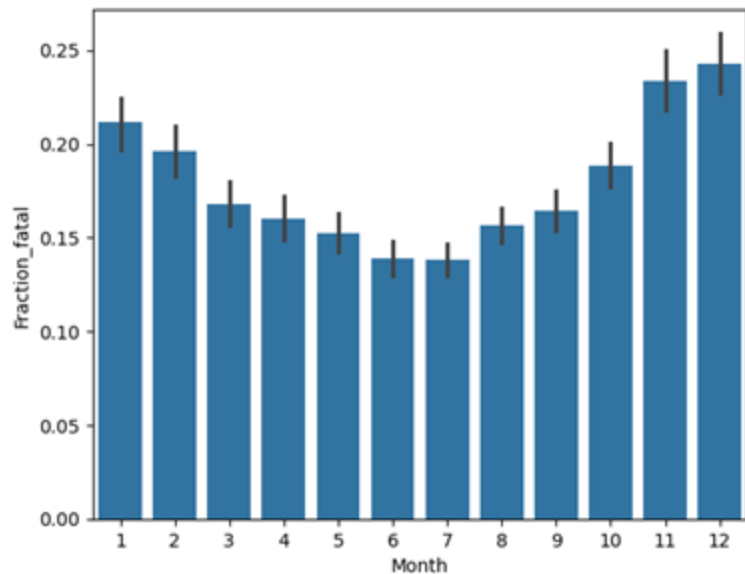
Results

Cessna and Piper have the best safety metrics.



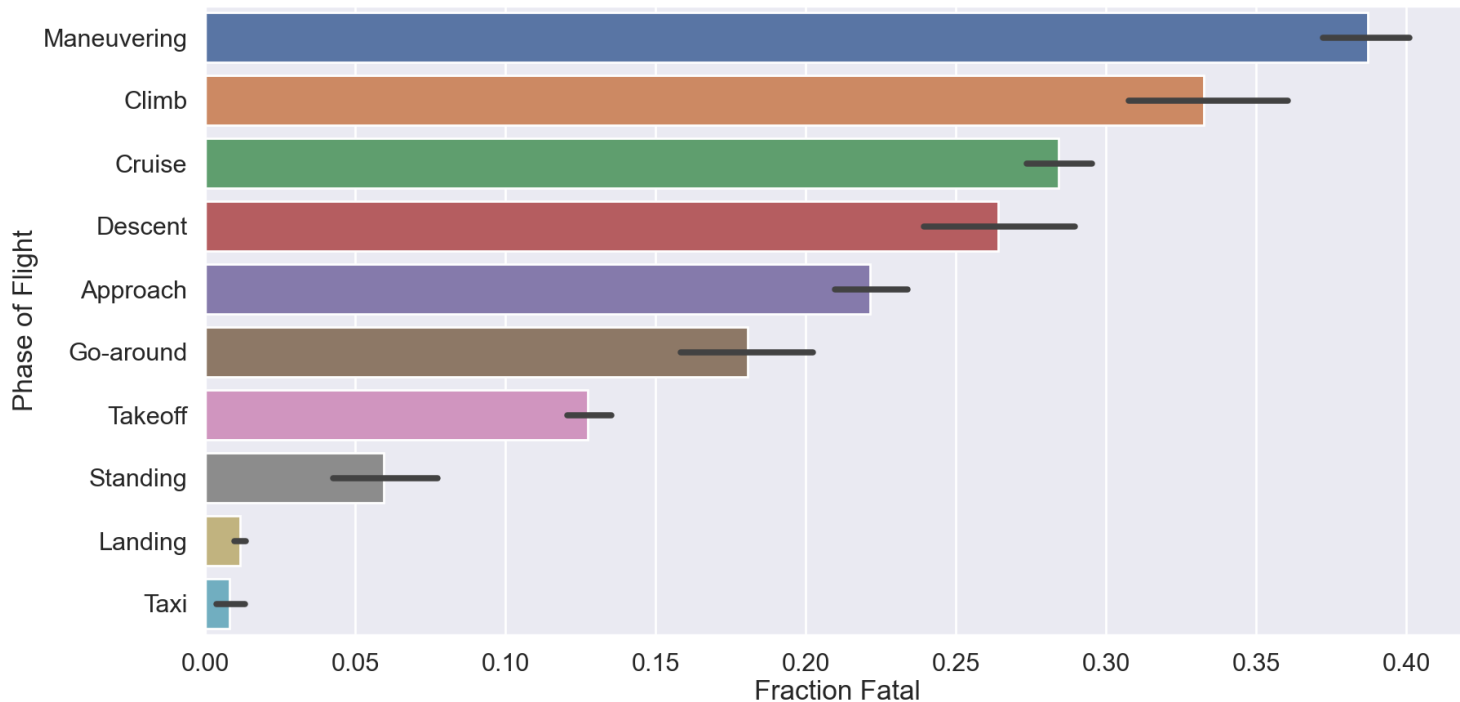
Results

The winter months are the most dangerous for flying.



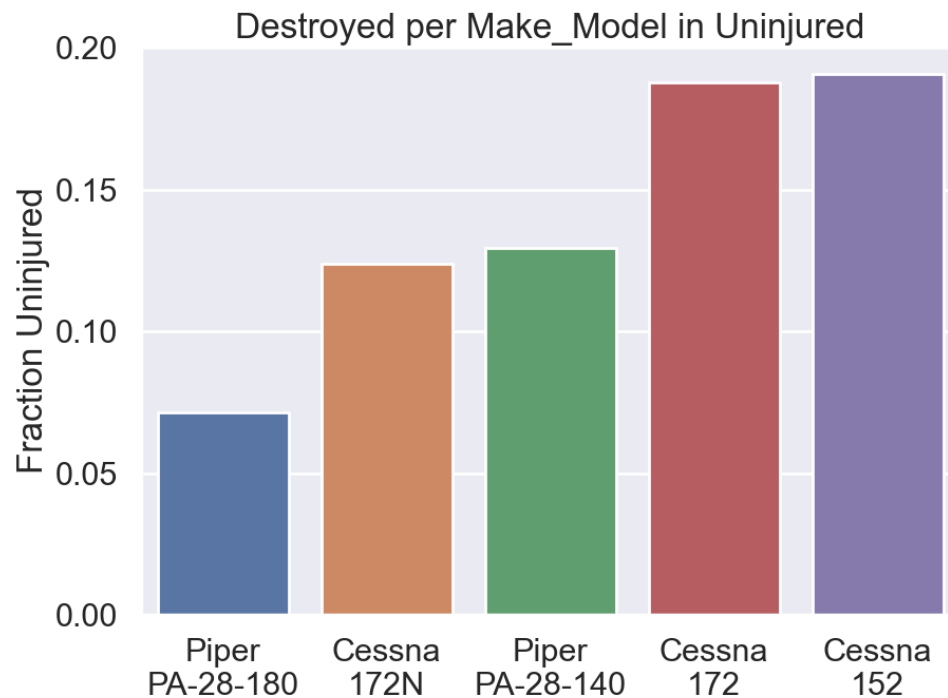
Results

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



Results

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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