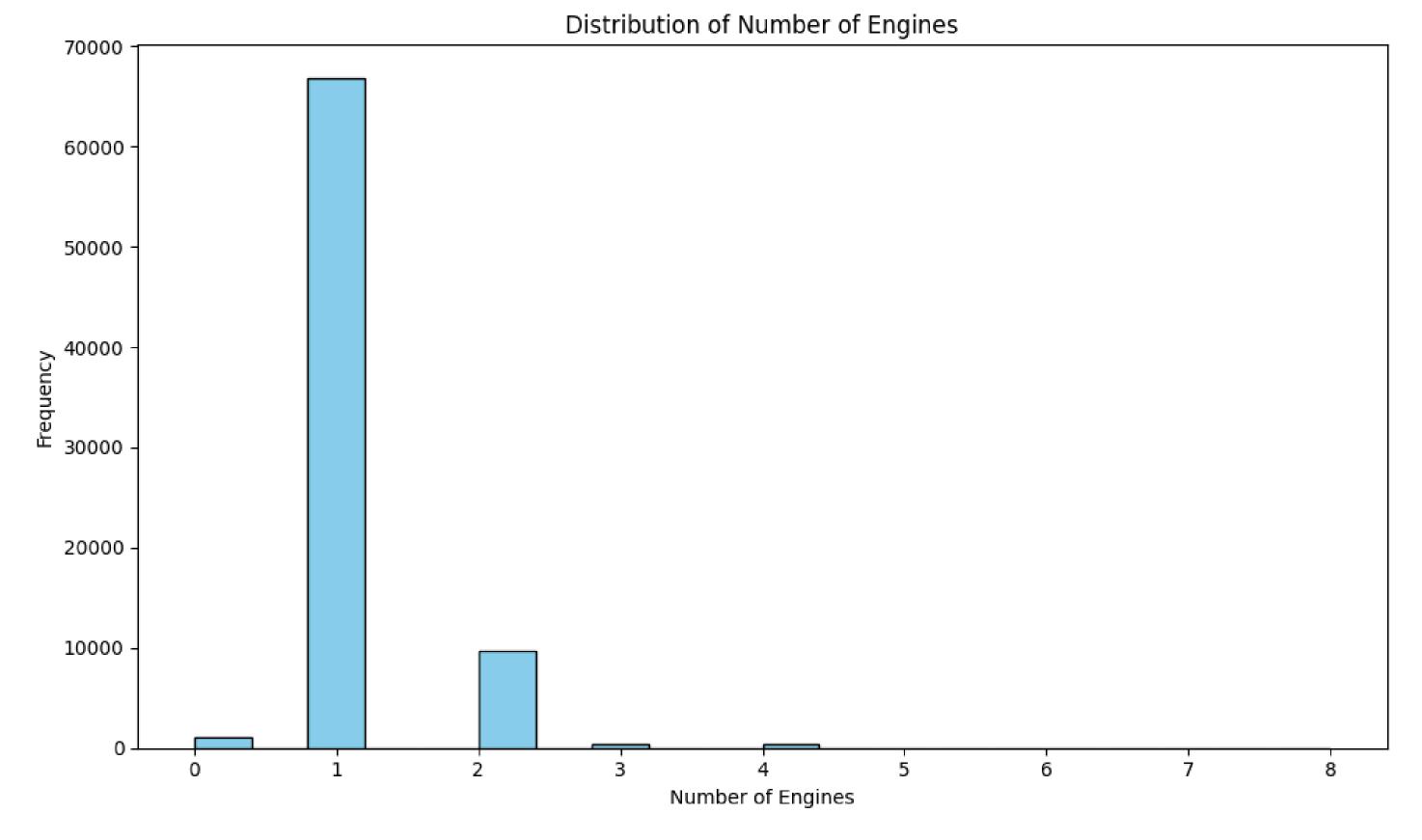
- Title: Aviation Safety Analysis
- Subtitle: A comprehensive analysis of aviation accident data
- Name: Martin Kabare

• Overview: This project analyzes aviation accident data to identify patterns and insights that can improve aviation safety.

• Purpose: To determine factors contributing to accidents and recommend safer aircraft models.

• Data Source: National Transportation Safety Board (NTSB) aviation accident database, covering accidents from 1985 to 2022.

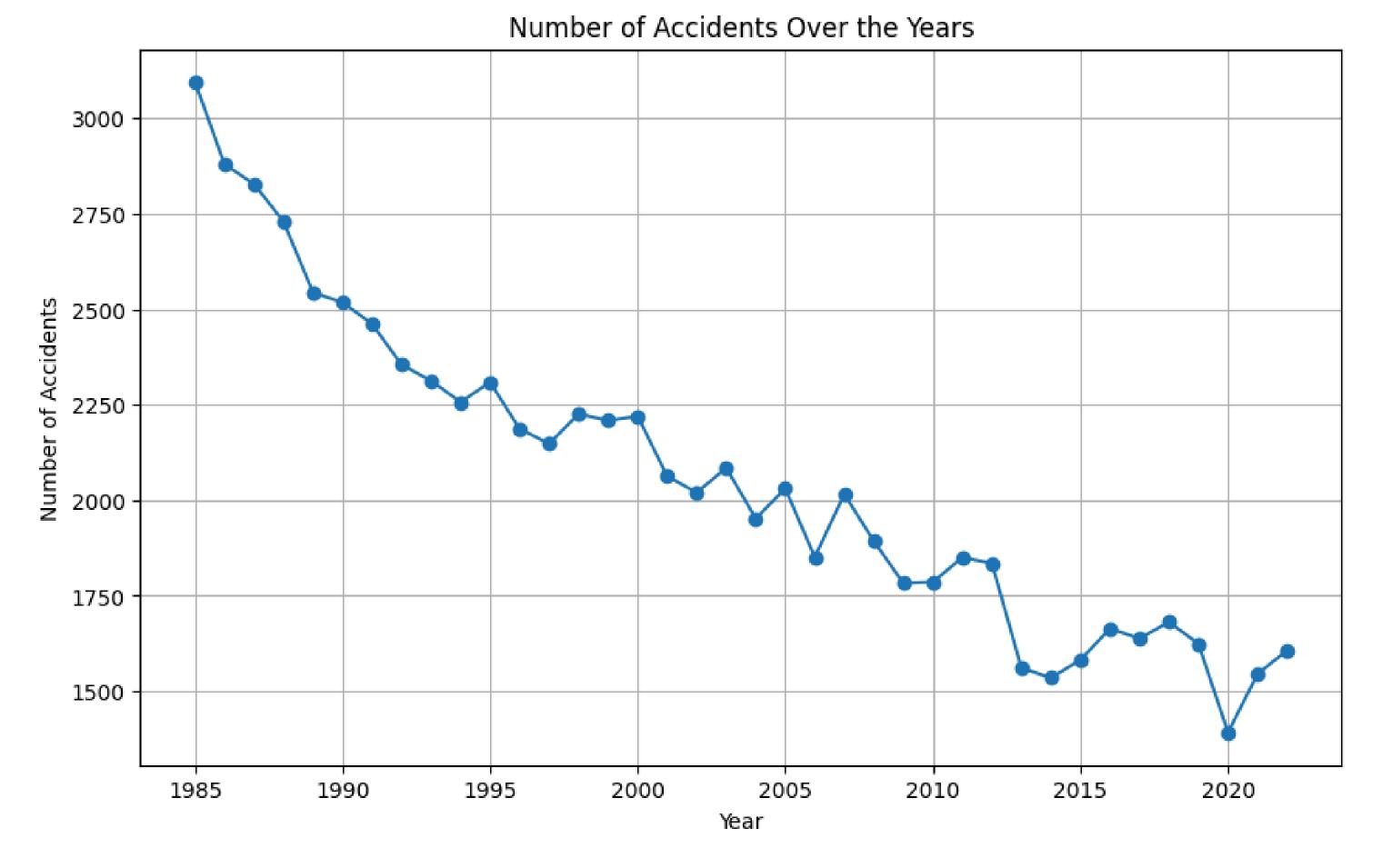


Single-engine aircraft dominate the accident statistics due to their prevalence in general aviation. Targeted safety improvements in this category could significantly impact overall aviation safety.

Top 10 Most Common Makes 

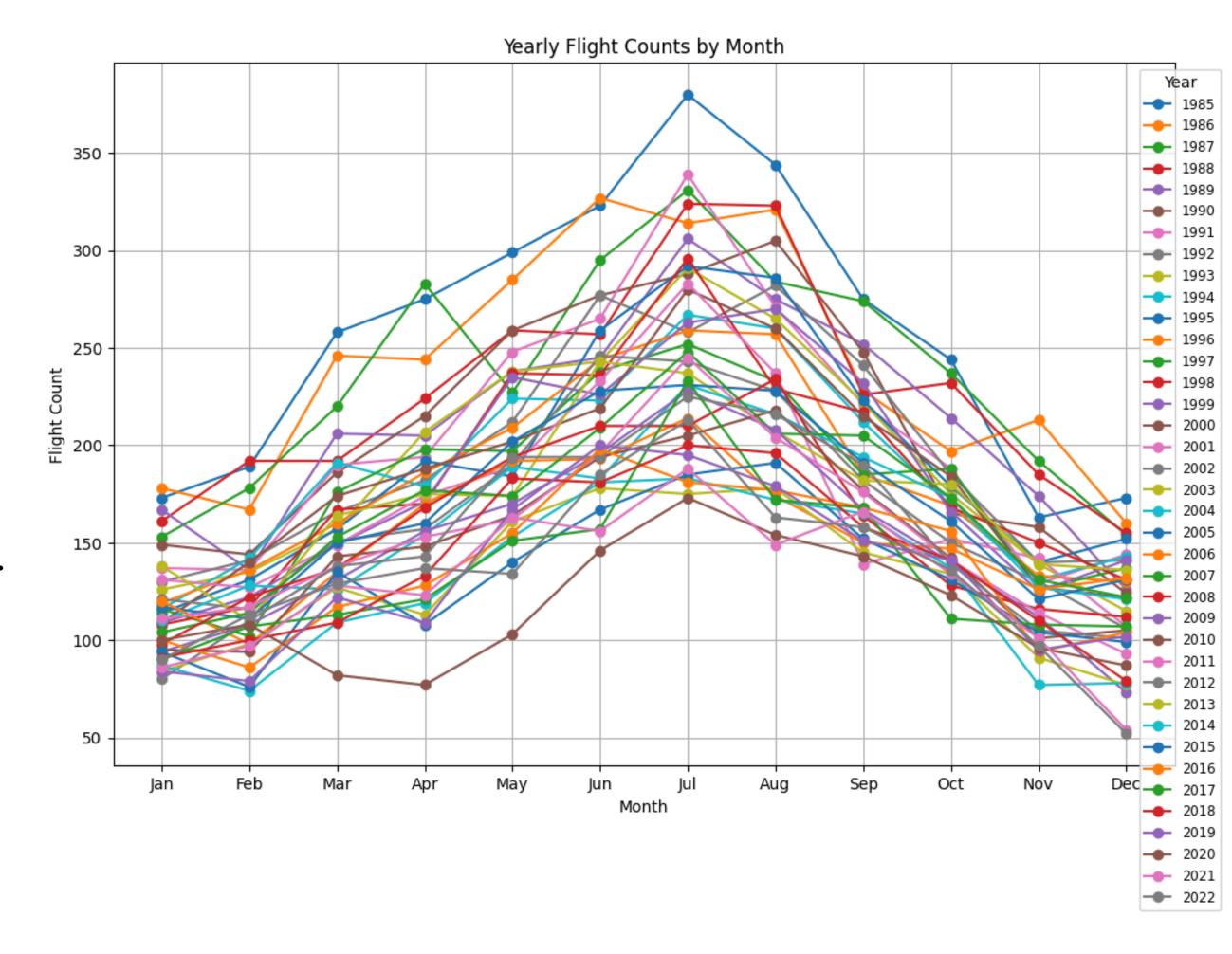
Cessna and Piper dominate the accident statistics due to their prevalence in general aviation.

Make



The data shows a positive trend in aviation safety with a significant decrease in accidents over the years.

The data reveals a consistent seasonal pattern in flight activity, with peaks in the summer and lows in the winter.



## Recommendations

- 1. Focus on Safety During Critical Phases: Enhance pilot training and safety measures specifically for the landing and takeoff phases.
- 2. Weather Monitoring and Decision Making: Improve weather monitoring systems and decision—making protocols to reduce accidents under VMC.
- 3. Regular Maintenance and Inspections: Ensure stringent maintenance and inspection routines, especially for single-engine aircraft.
- 4. Seasonal Safety Campaigns: Conduct safety awareness campaigns during the summer months to address the higher accident rates.
- 5. Invest in Advanced Safety Technologies: Invest in advanced avionics and safety technologies to further reduce the accident rates.

## Conclusion

By focusing on these areas, the company can confidently enter the aircraft industry with a robust safety strategy, minimizing risks and ensuring safer operations. This approach not only aligns with our commitment to safety but also positions the company as a responsible and forward-thinking player in the aviation sector.