



# Aircraft Acquisition Strategy: Safest Options for Expansion

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# Executive Overview

Objective: Expand into the aviation industry with minimal operational risk.

Methodology: Analyze aircraft Makes and models using accident and injury data (Aviation\_data).

Goal: Identify the safest aircrafts for acquisition across segments.

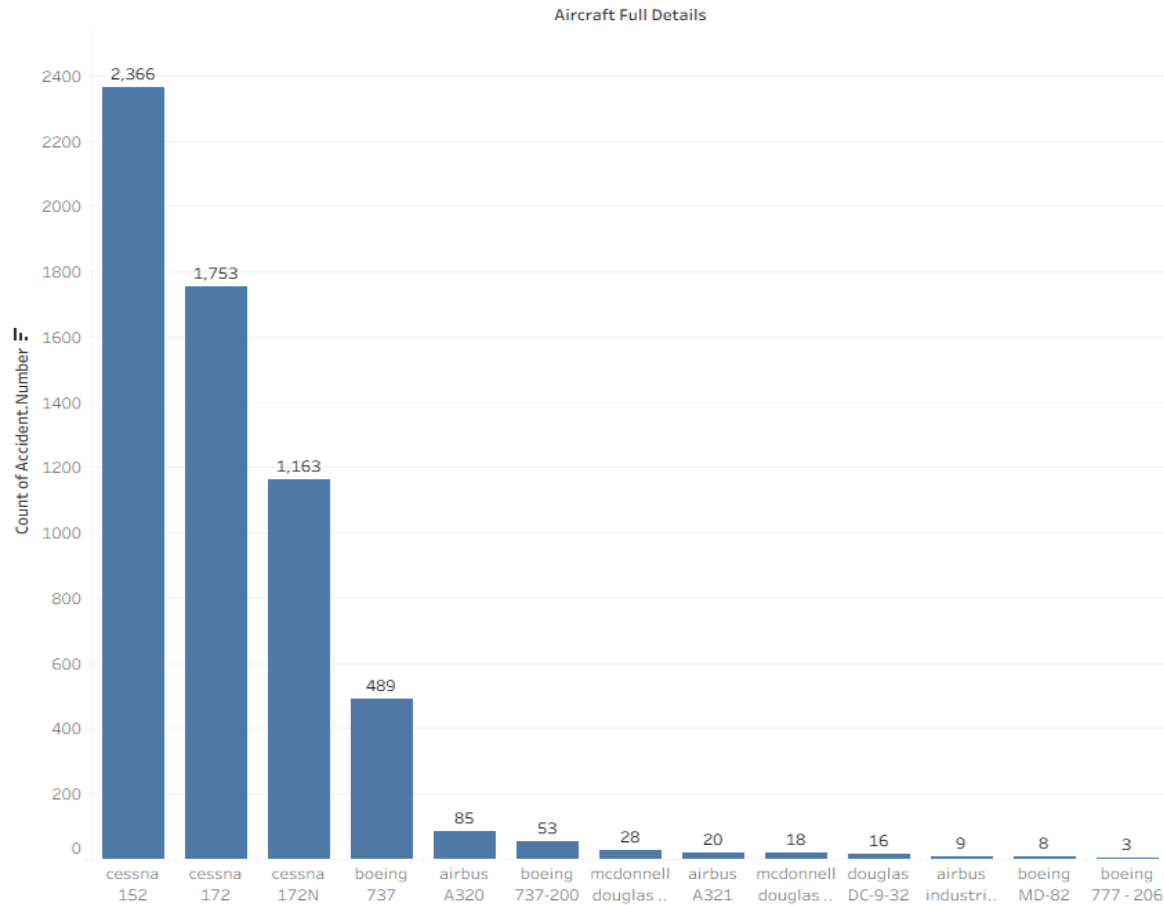


# Safety Analysis Framework

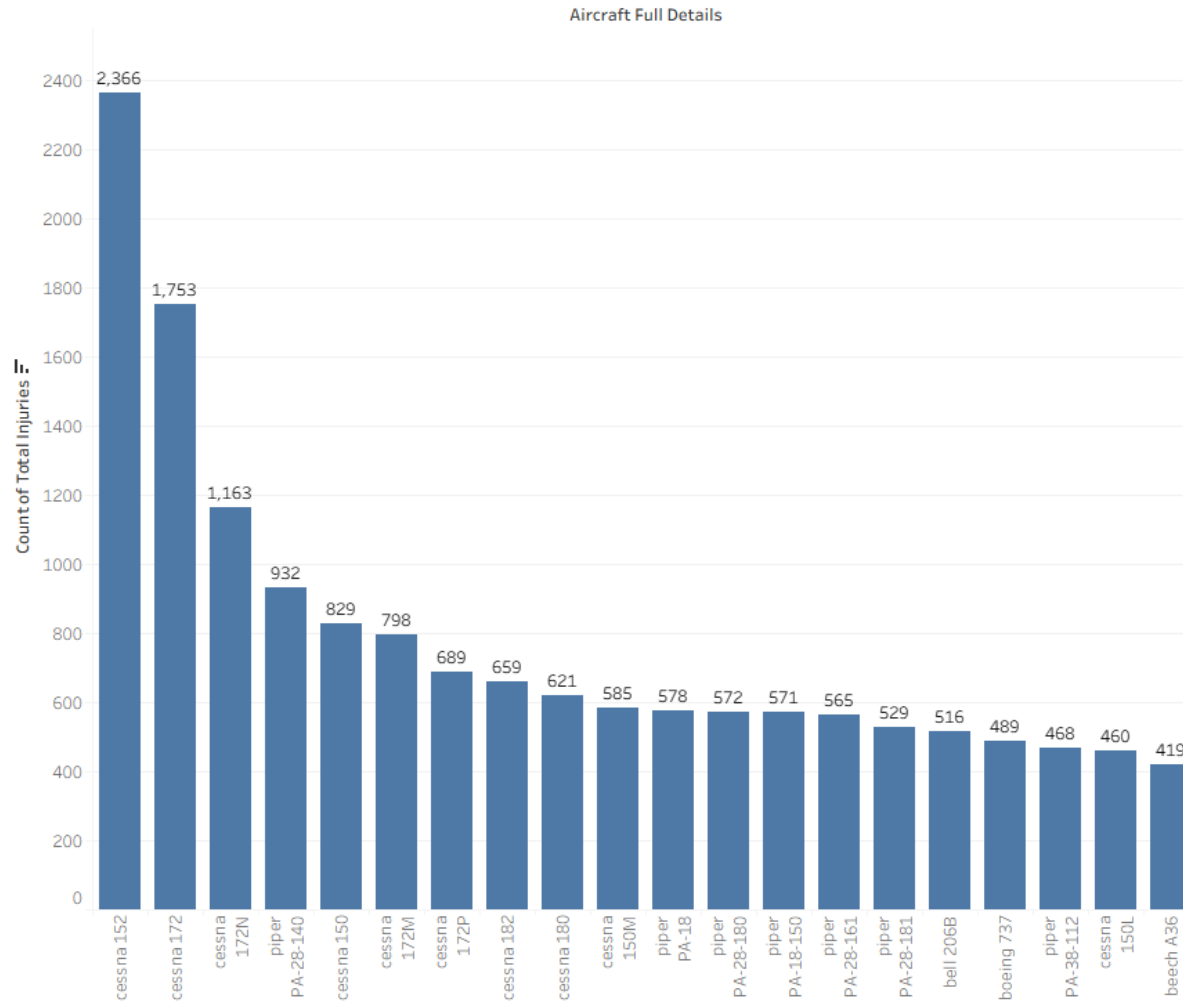
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- Data Sources: Aviation Data from the National Transport and Safety Board.
- Metrics: Accidents, fatalities, serious injuries, and minor injuries.

## Aircrafts With Most Accidents

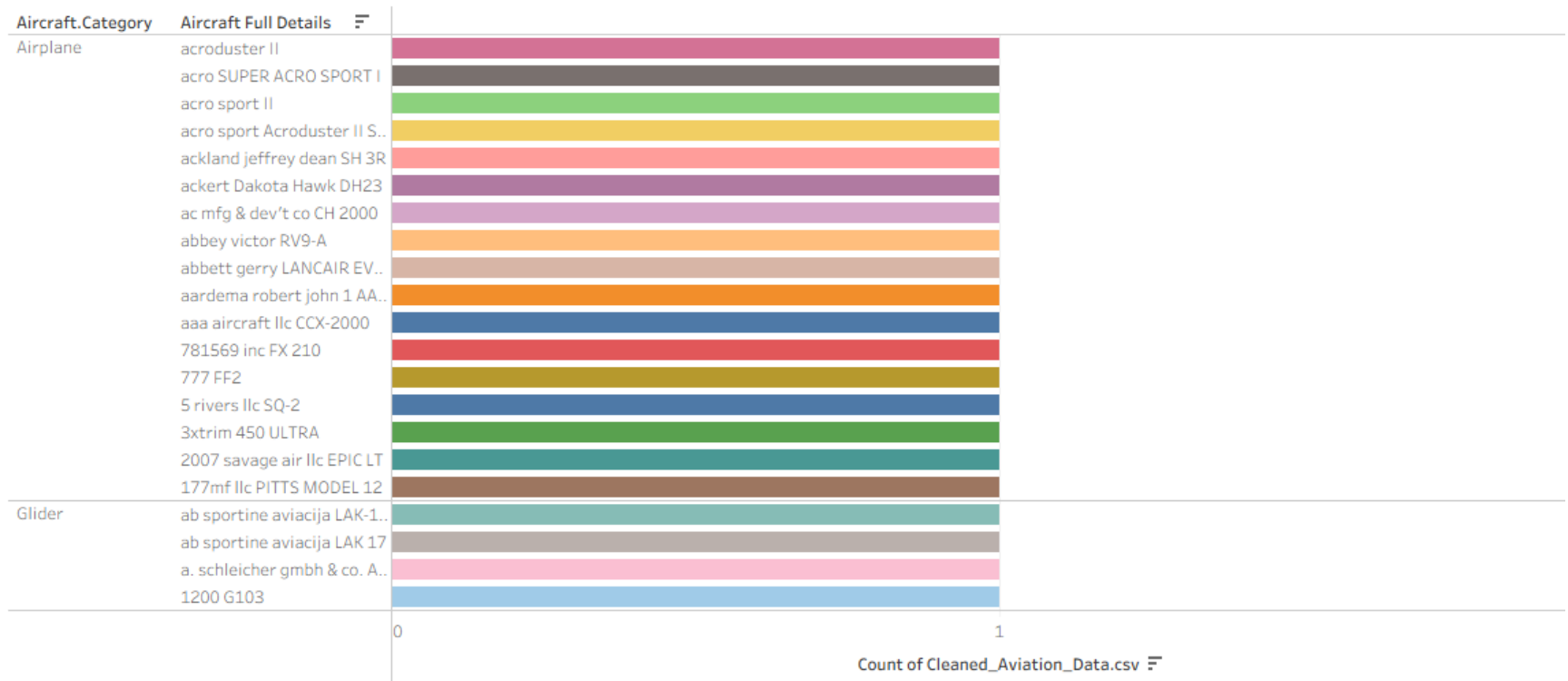


Aircrafts with most no.of accidents



# Aircrafts with Most No. of Injuries

# Aircrafts with Least No of Accidents



# Aircrafts with Least no of Injuries



# Key Observations

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Cessna models recorded the highest number of accidents and injuries overall in the dataset.

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The Cessna 152 specifically topped both categories — most accidents and most total injuries

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The **Accro series** of planes recorded the **fewest accidents** among all models in the dataset. Additionally, there is a subset of aircraft that reported **only a single injury incident**.

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It's important to note that the dataset includes **accident and injury counts** but **does not provide exposure data** such as total flight hours or number of flights per aircraft model. Consequently, the safety comparisons presented here are based on **raw incident counts** rather than **standardized rates** (e.g., accidents per million flight hours).



# Recommendations

To accurately determine the safety performance of each aircraft model, it is recommended to obtain additional data such as the number of flights or total flight hours per plane type. This would enable a more reliable calculation of incident rates rather than relying solely on raw accident counts.

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If the decision is made to proceed using the current dataset and focus on planes with the fewest recorded accidents, the following steps are proposed:

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Conduct detailed financial modeling and acquisition due diligence.

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Engage with manufacturers and certified resellers to obtain final pricing and procurement terms.

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Plan a 12-month pilot operations phase to benchmark aircraft performance, maintenance requirements, and operational efficiency.

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Develop an expansion roadmap for scaling into commercial and regional operations based on pilot phase outcomes.

# Thank You

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