

Project.

2025

Aviation Accident Analysis

**Presented
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PRESENTATION

01

INTRODUCTION

Our company is launching a new airline division that is focused on buying and operating airplanes for commercial and private enterprises.

I was tasked with analysing the aviation accident data from 1919 to 2023 to find the safest and lowest-risk models for our first fleet purchase.

02

Business Problem

Our company is new to the aviation industry and therefore has no experience in the field. Without it, safety decisions carry high risk. This analysis aims to reduce that risk by pointing us toward the safest options.

Objectives

03

01 Analyse aircraft types/models with
the most and least fatalities

02 Analyse operators who have caused
the most and least fatalities

03 Analyse countries that are at high risk
of aircraft accidents

04

Data Overview & methodology

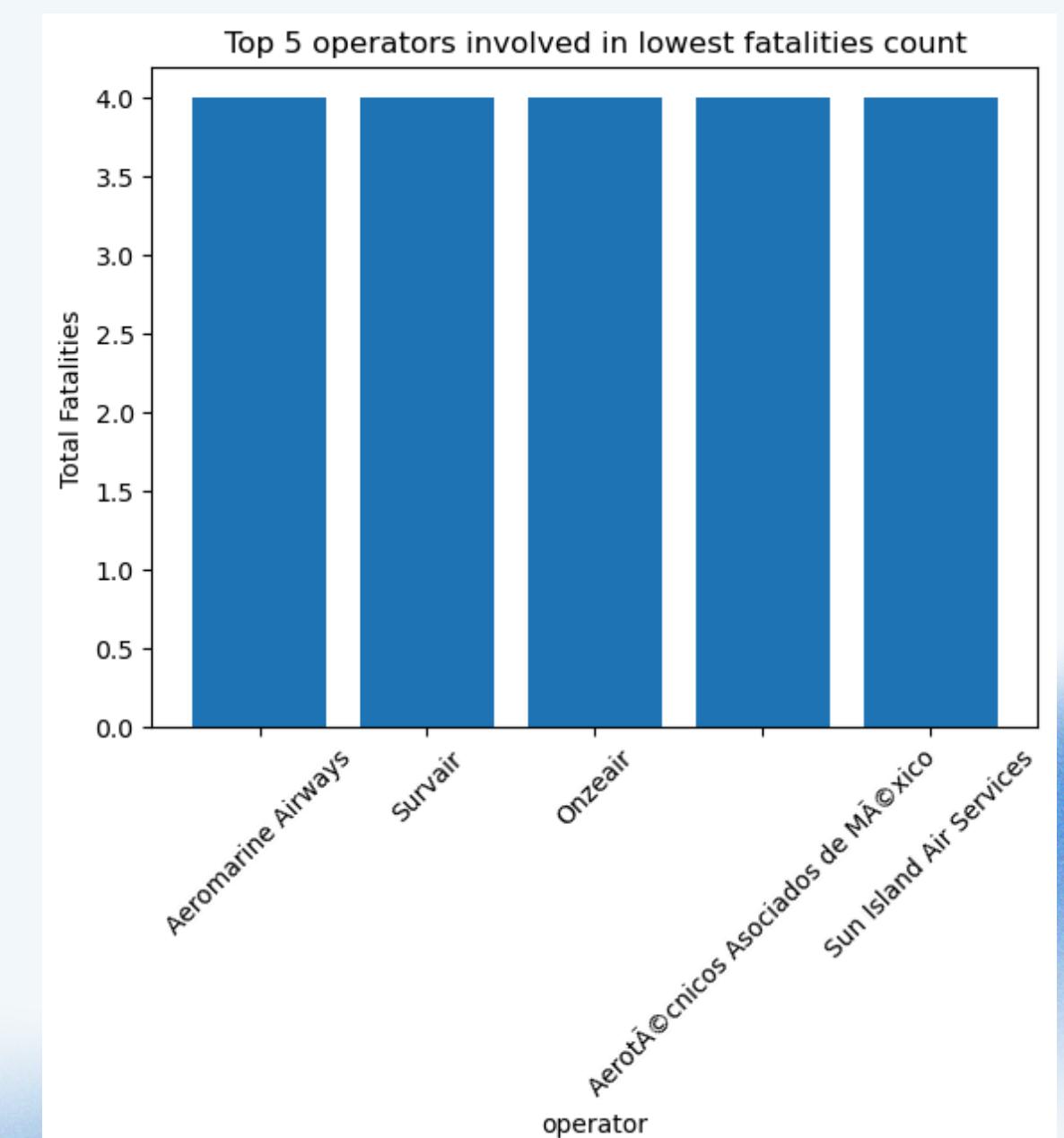
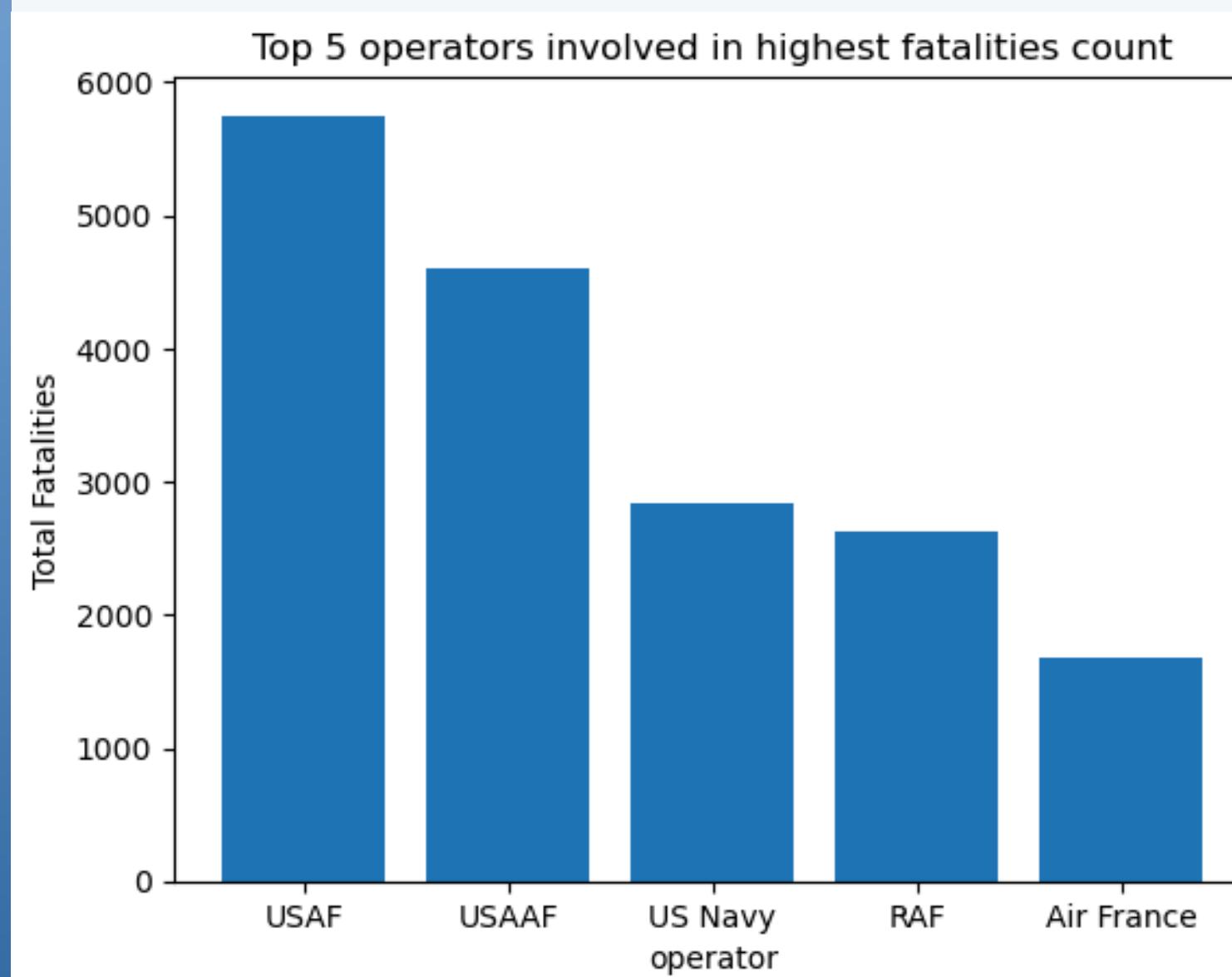
The dataset used was of global aviation accidents from 1991 to 2023. The key features of the dataset are operator, aircraft type, country, and no. of fatalities..

The data was cleaned and grouped by operator, aircraft type, and country. And then visualized the output, to show us the results.

05

Findings: Operators

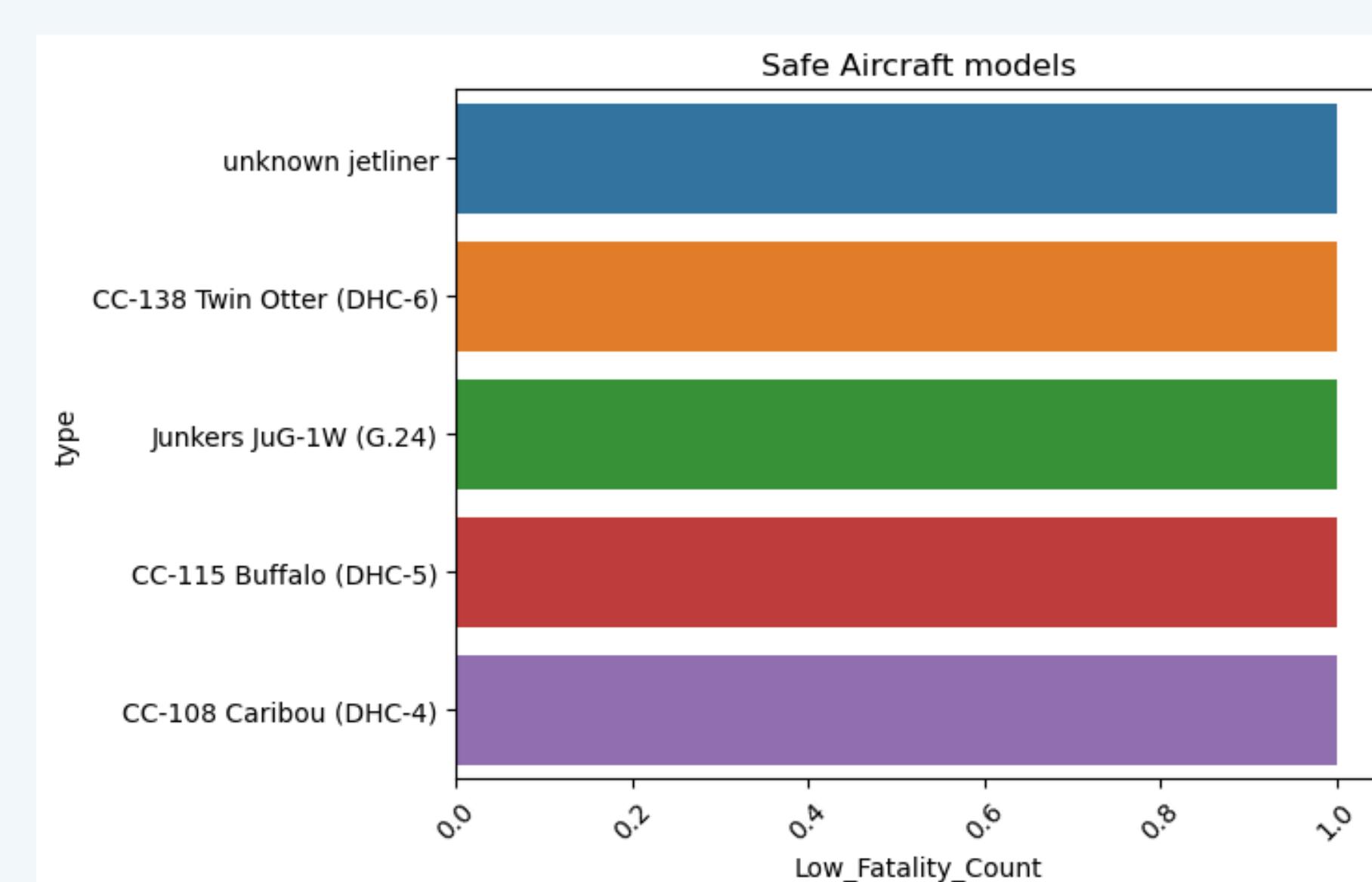
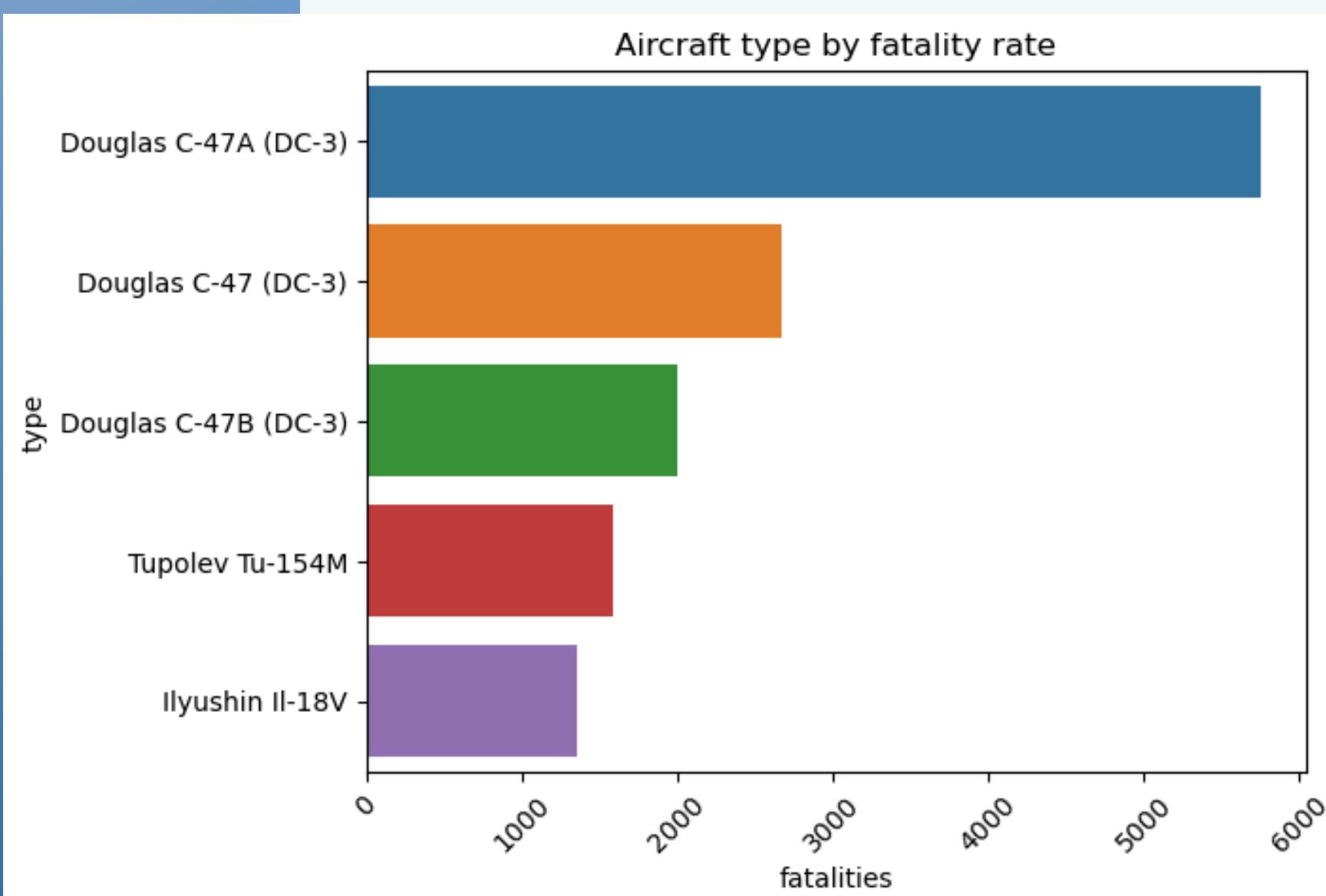
This two visualization tell us the operators with the highest and lowest fatality count and therefore tell us which operators are the safest to use.



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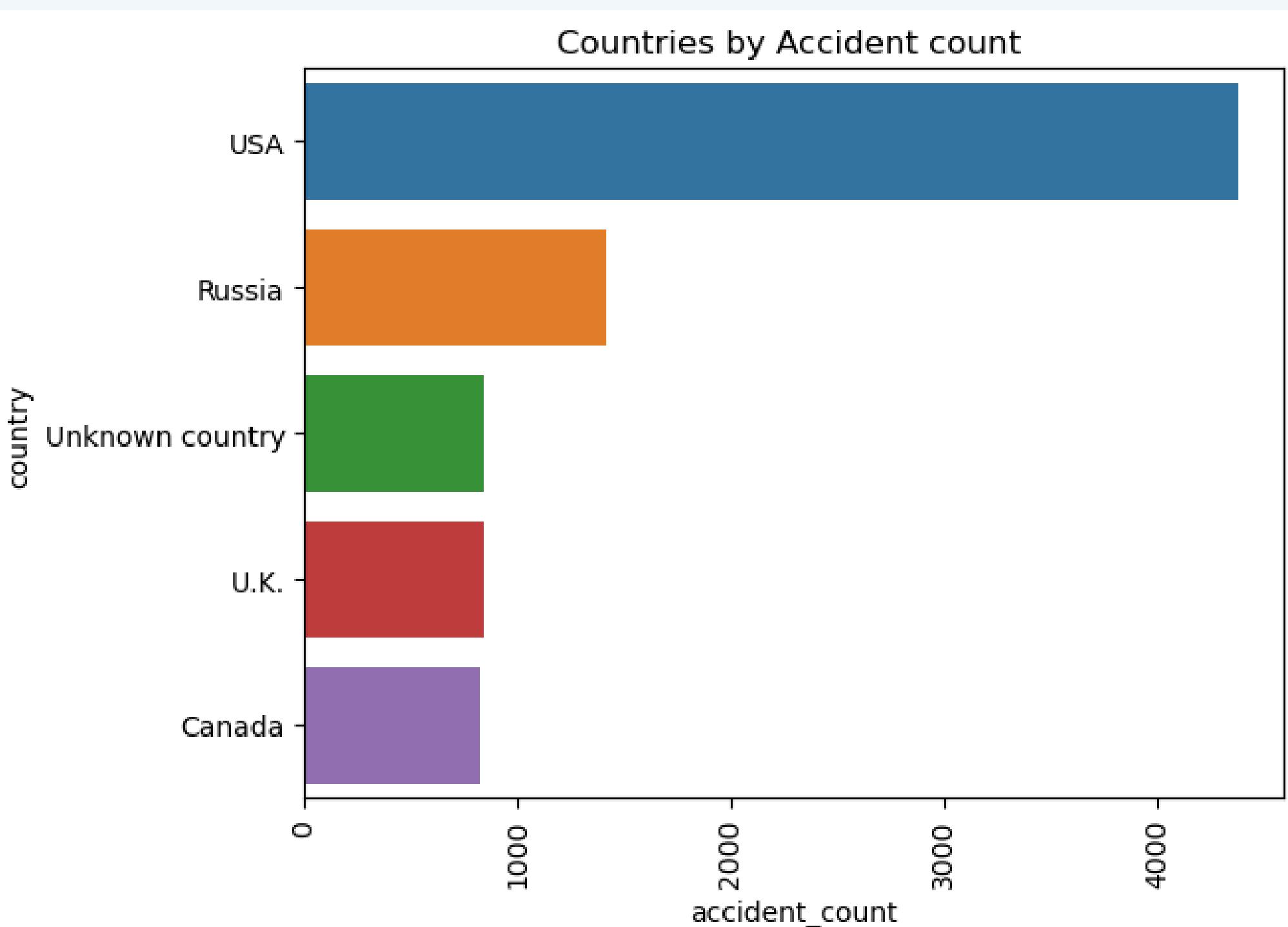
Aircraft Types

The visualizations help us identify the aircraft types with the highest and lowest fatalities. This should help us in choosing the safest aircraft models that will pose little to no risk to the company



Countries

This visualization shows us the countries that are at a high risk of aircraft accidents. Therefore, this helps us in identifying countries that require more safety measures to be put in place when operating there.



Recommendations

- ~ Avoid operators and aircraft models that have the
The highest fatality risk.
- ~ Prioritize aircraft with the strongest
safety records.
- ~ Find safe measures when operating
in countries that are at risk of aircraft accidents

09

Conclusion

In conclusion, our safest strategy is to avoid the risky operators, select aircraft types with the safest records, and find safety measures when operating in countries that are at high risk of accidents.



THANK YOU