

What Aircrafts Would be Best For the Company?

Models, Makes, and Accident Rates

A dark blue diagonal gradient bar that starts from the bottom left corner and extends towards the top right corner, covering the lower half of the slide.

What Makes a Good Aircraft?

A few key points I want to start with on how we'll figure out the best aircraft for the business.

- 1. Makes and models of airplanes with the lowest percentages of injuries
- 2. Engine type and number of engines and whether or not it contributes to safety using the data provided
- 3. Weather conditions and how they contribute to accident rates

Cleansing and Missing Data: What Does that Look Like?

Cleaning data takes a few steps, here's what the process looks like.

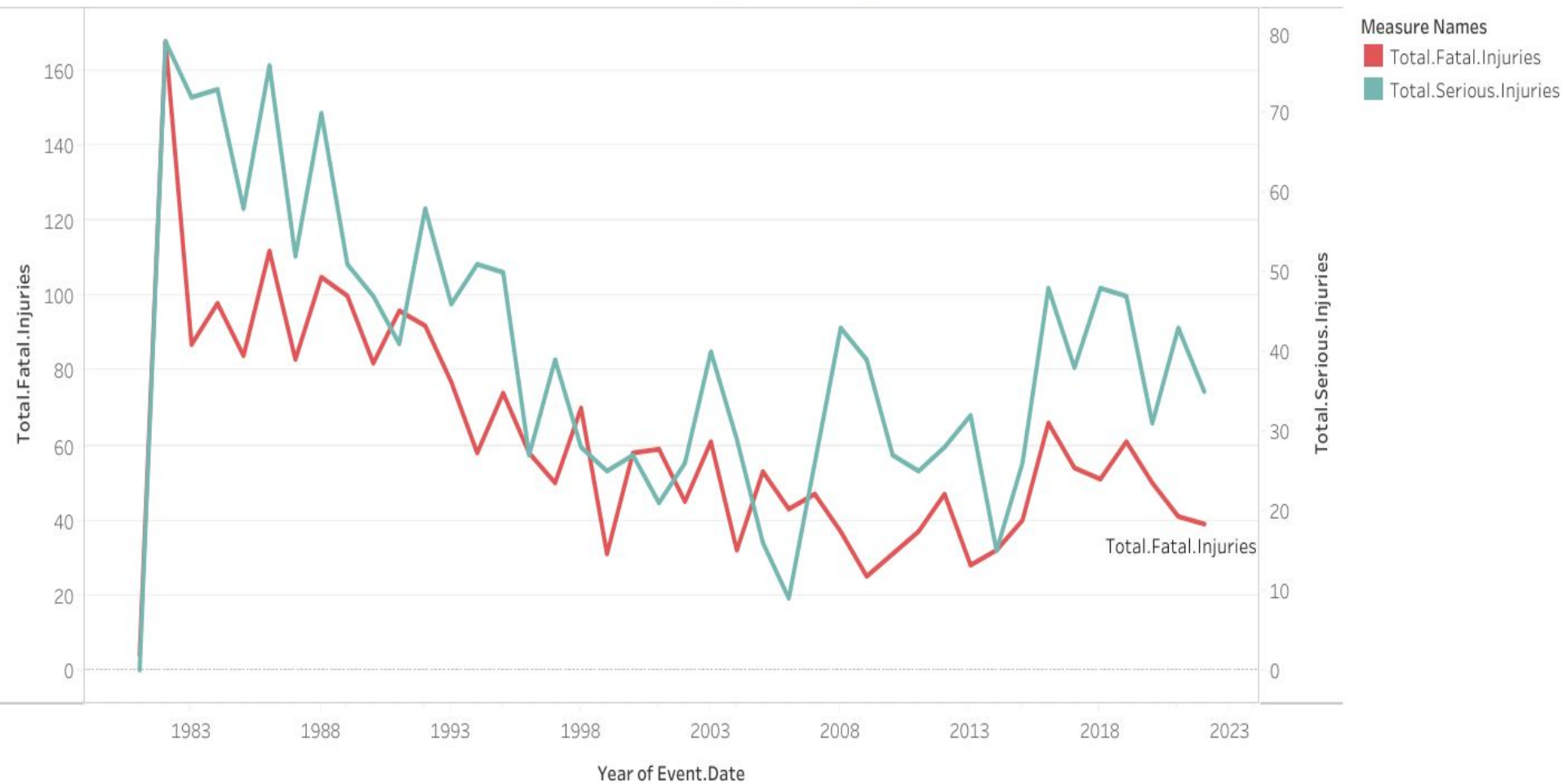
- Get Familiar
- Look for Outliers
- Extract, Revise and Remove
- Replace Messy Data

Passengers Injured and Aircraft Damage:

Let's look at Graphs that Show:

- Serious/Fatal Injuries pulled from every year.
- Our top most damaged Aircrafts

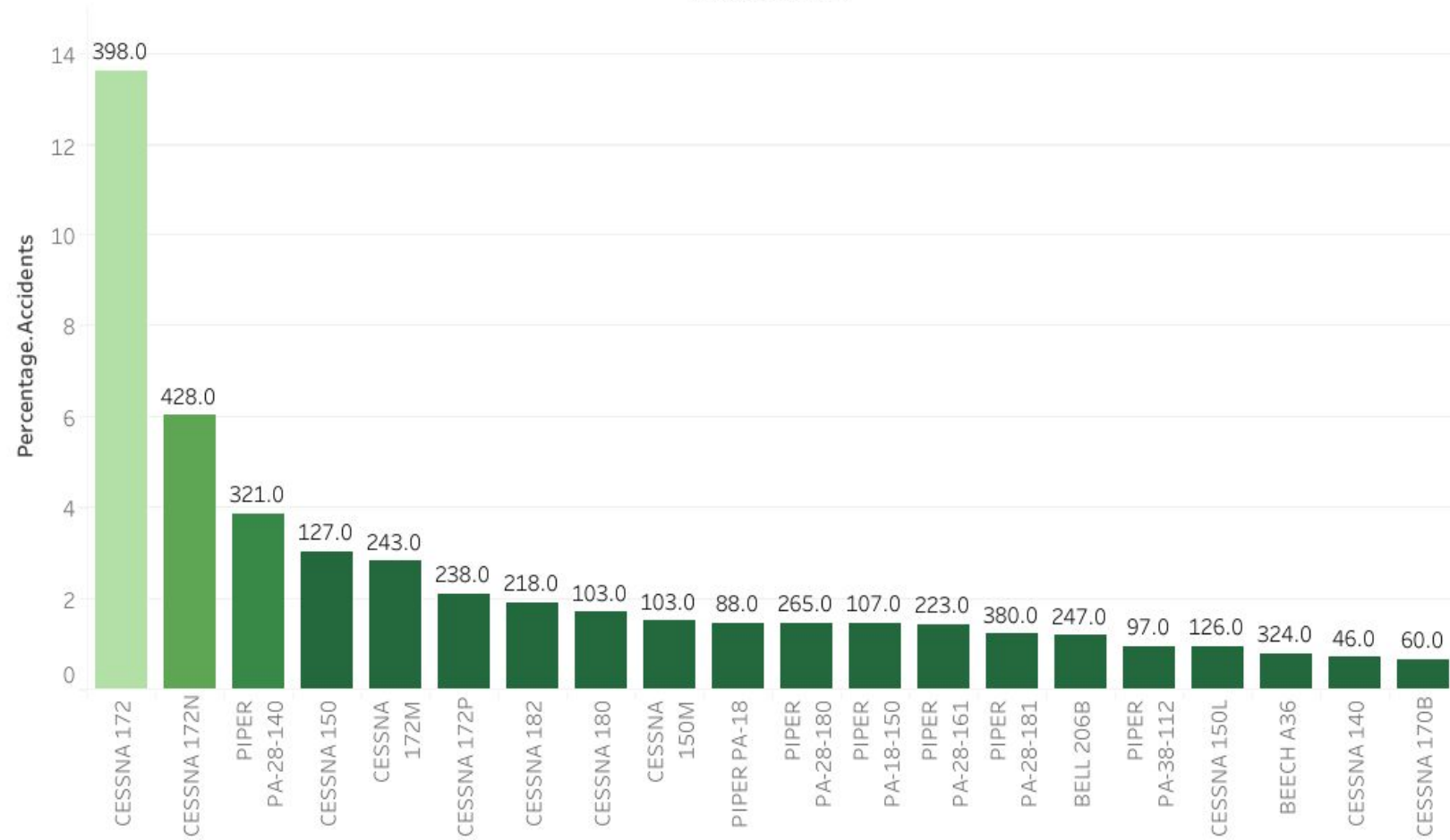
<Fatal and Serious Injuries by Year>



<Top 20 Most Damged Planes by Percentage>

Make.and.Model

Percentage.Accidents



Unknown Fillers: Addressing Unseen Variables:

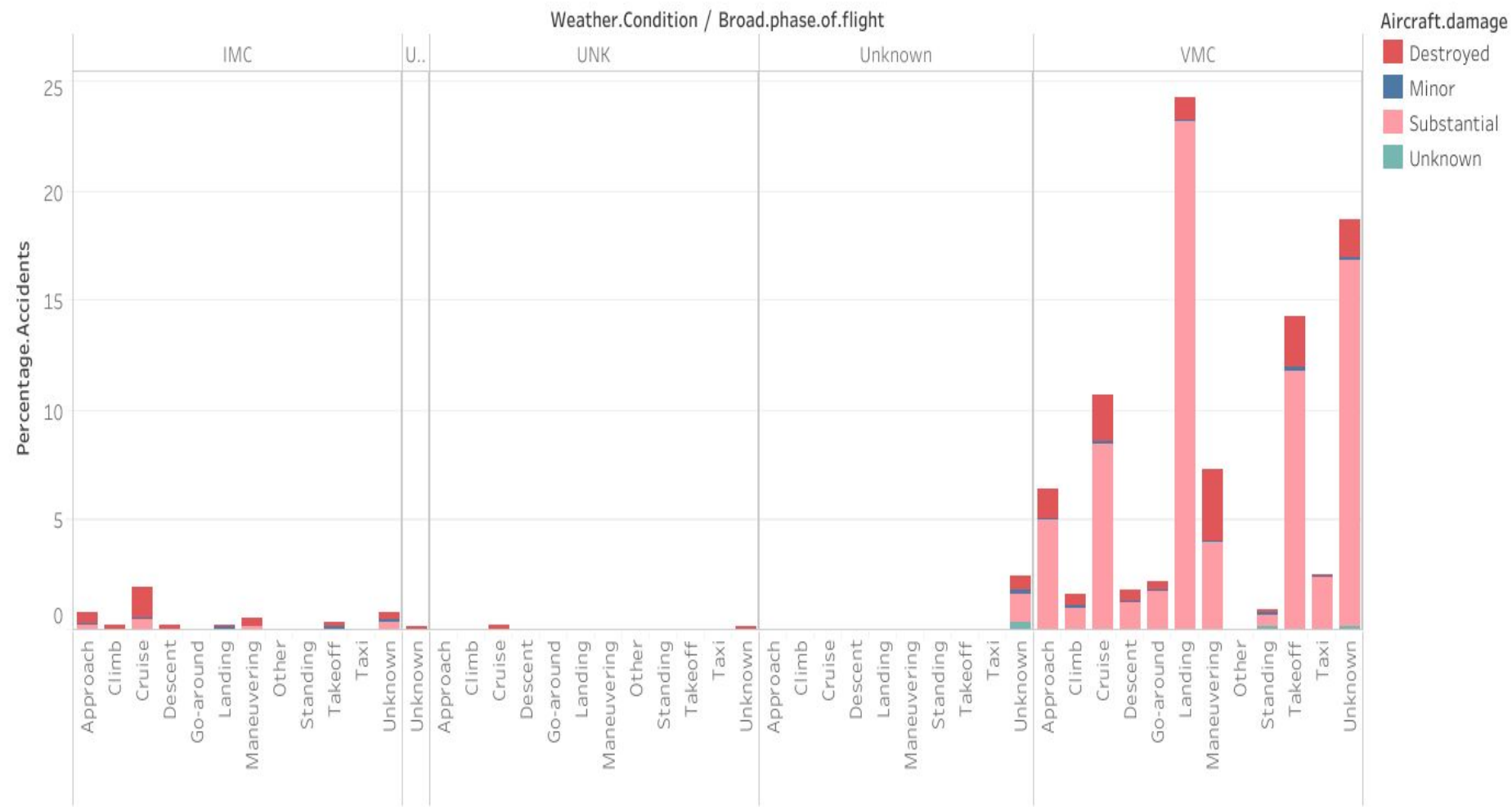
Certain columns with unknown values, such as 'Location and Country' and 'Amateur Built,' are filled in with 'Unknown.' While not crucial, these entries may contribute as outliers or essential data completions.

Navigating Unpredictability:

Next We'll look at the our graphs for:

- The best and worst weather conditions to be flying in.
- The phases of flight to be most cautious during.

<Best Weather Conditions and Phase of Flights to be Cautious During>

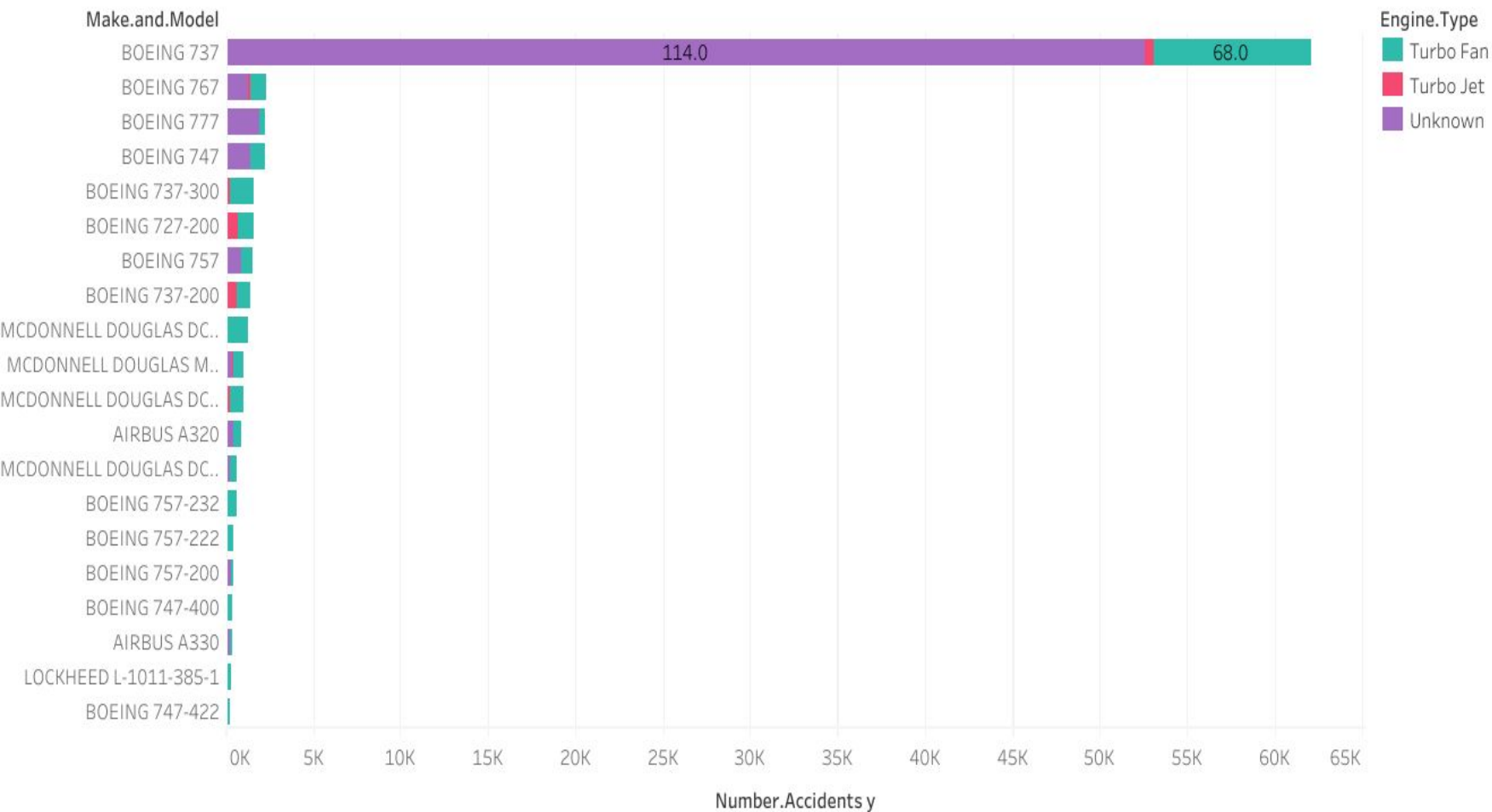


Engines and Their Effect:

Now let's look at and talk about:

- The engines used on our recommended aircrafts.
- Which ones have the most overall damages.

<Engine Type and Number of Engines Most Used>



Recommendations:

Based on our analysis, the top three aircrafts that I can recommend:

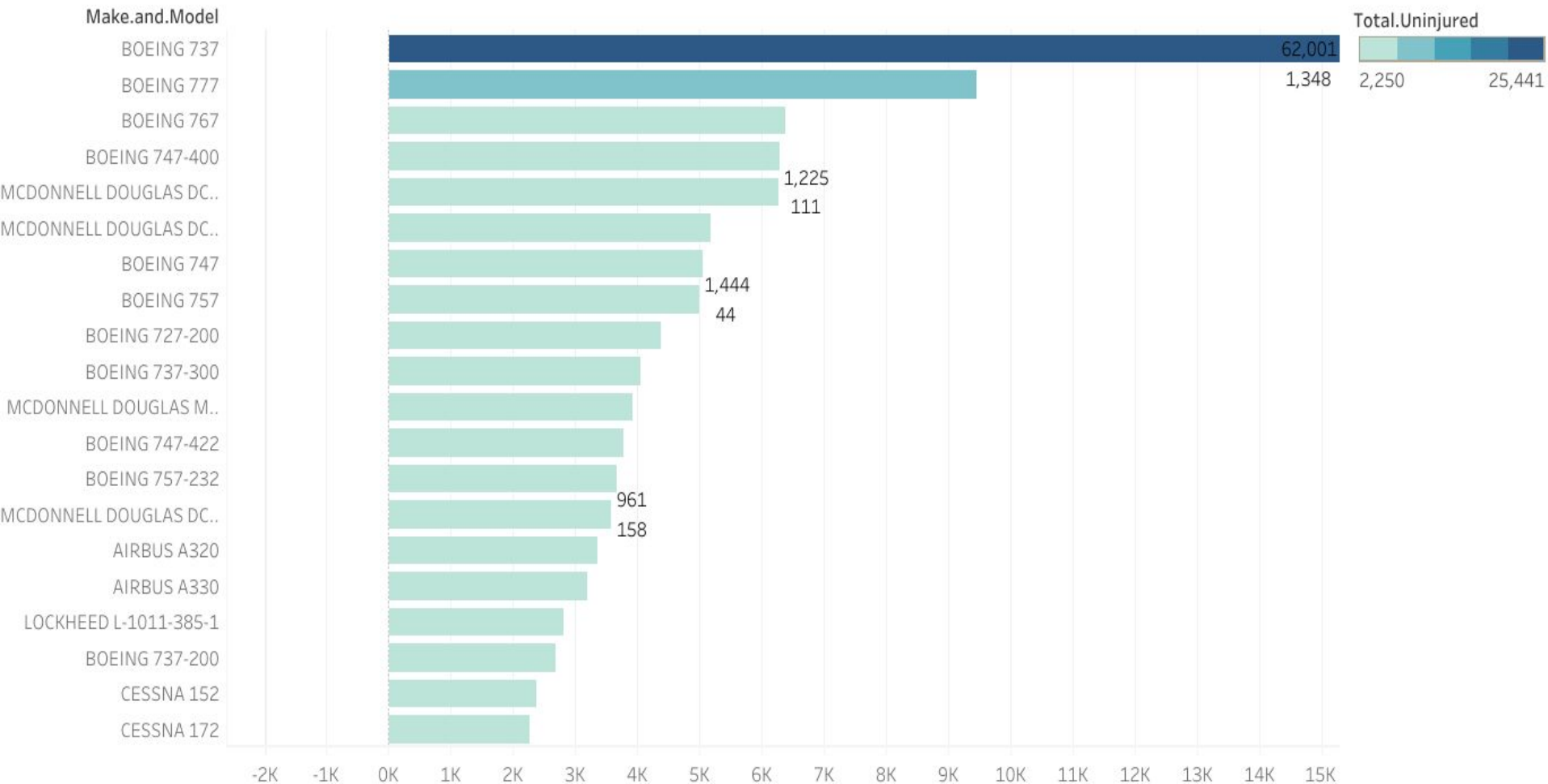
- **BOEING 737**
- **BOEING 777**
- **BOEING 767**

These have the most flights with:

- Least amount of crashes
- Lowest Fatality (Percentage-wise)
- Better Engines

Visuals Below:

<Top 20 Reccomendations>



More Details and Closing Statement:

Our Top 3 picks average between a 0.28%-0.1% accident rate, as well as on average have **1**

Reciprocating Turbo Fan engine.

Noteworthy is the **CESSNA 152**, with over 5 million crashes but a comparatively low fatality rate, making it a subject for further consideration.

Please Refer to Tableau Dashboards attached

Thank You!

Name: Ariella Cerasuolo

Email: Ariella.Cerasuolo@gmail.com

LinkedIn:

<https://www.linkedin.com/in/ariella-cerasuolo/>