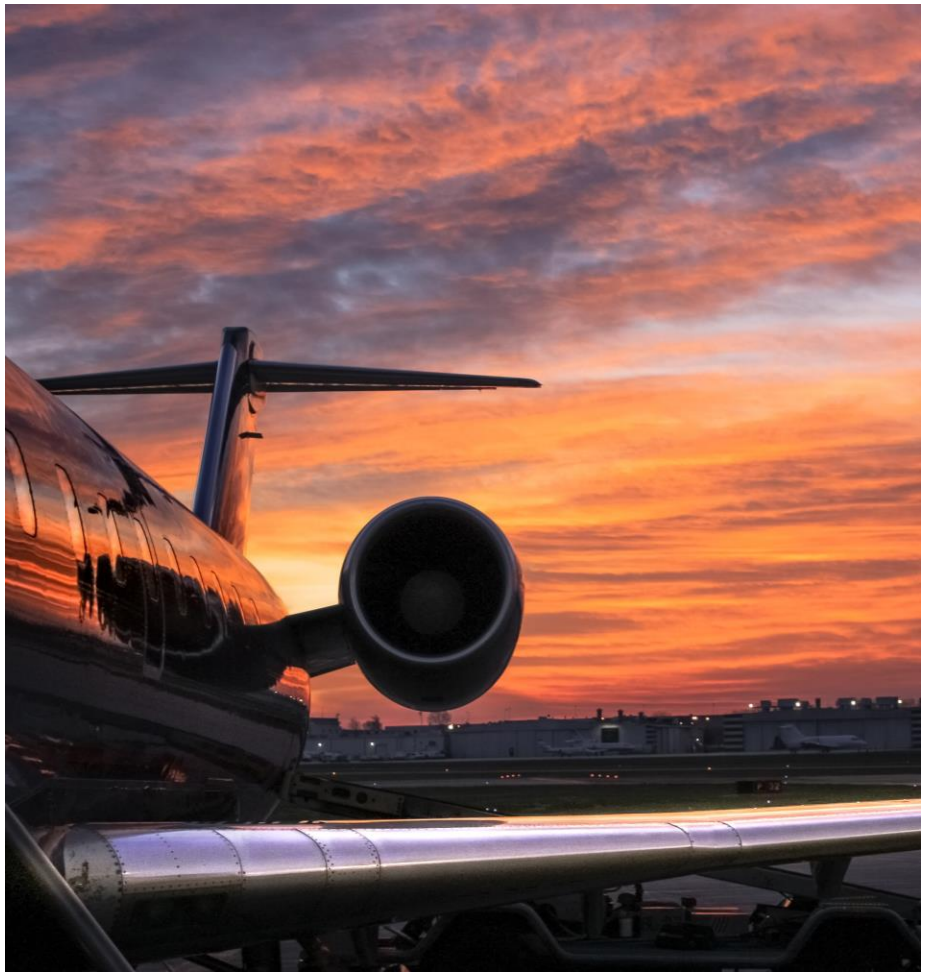
Analysis of Aviation Accidents

Insights from the Aviation Accident Database

INTRODUCTION



- The world has come far in terms of travel especially air travel, but all this comes at a cost of lives and the machines due to accidents.
- Below is why safety is important if we are to make further advancements in this sector of travel.

1.Human Lives at Risk:

- Air travel carries millions of passengers daily worldwide
- Even a single accident can result in significant loss of life
- Ensuring passenger safety is paramount for airlines and regulatory bodies

2.Economic Impact:

- The aviation industry contributes significantly to global GDP
- Accidents can lead to substantial financial losses for airlines and economies
- Maintaining a strong safety record boosts consumer confidence and supports economic growth

3.Public Trust:

- High safety standards maintain public trust in air travel
- A good safety record is essential for the continued growth of the aviation industry

4.Technological Advancements:

- Continuous improvement in safety measures drives innovation in aviation technology
- Advanced safety features contribute to overall efficiency and performance of aircraft

5.Regulatory Compliance:

- Stringent safety regulations protect both passengers and crew members
- Adhering to these regulations ensures legal compliance and avoids penalties

Scope of the data:up to 2023

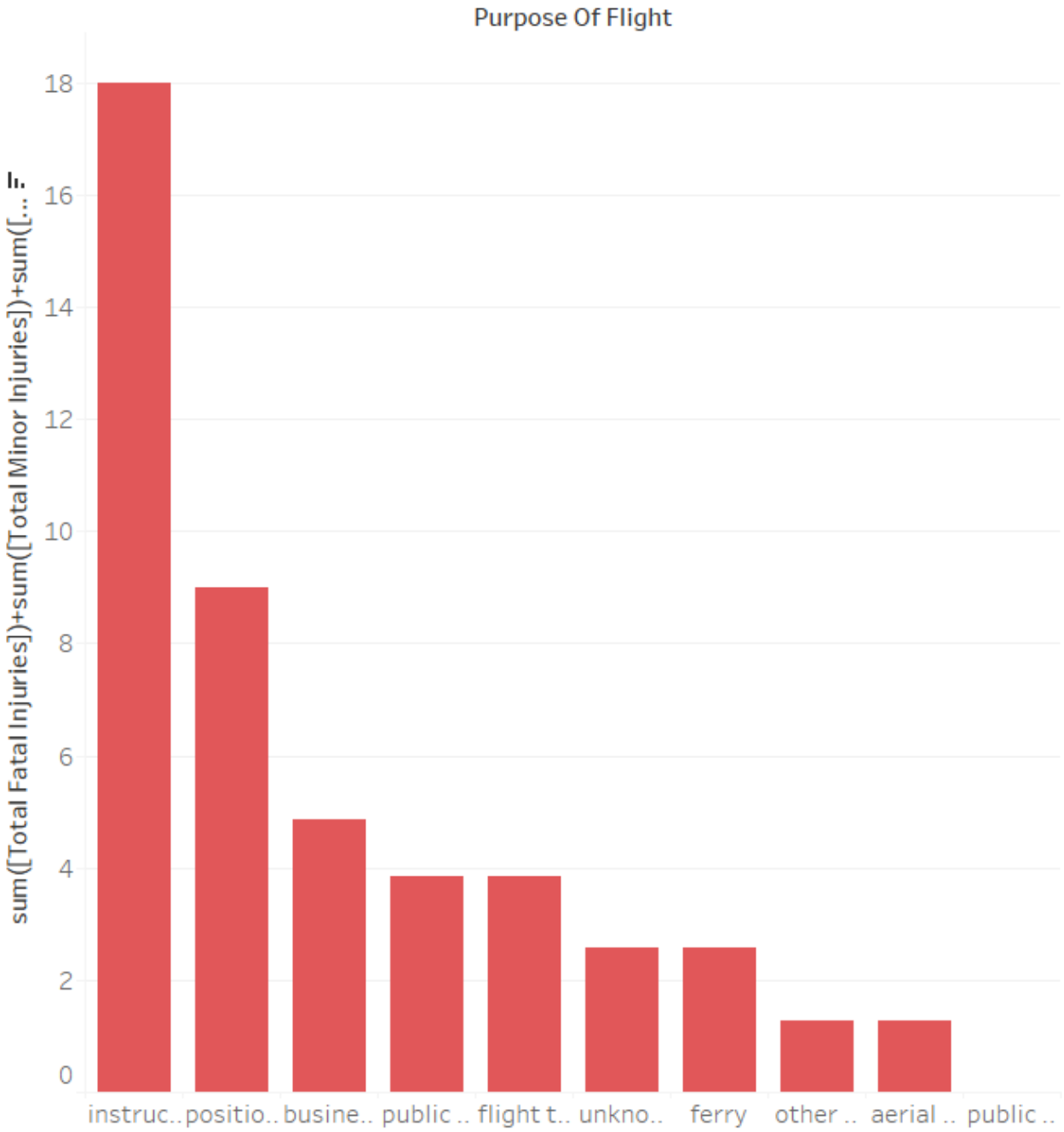
- The dataset covers aviation accidents up to 2023, providing a comprehensive view of recent trends and patterns. This scope offers several advantages:

1. Relevance
2. Completeness
3. Global Perspective
4. Depth of Information
5. Temporal Analysis

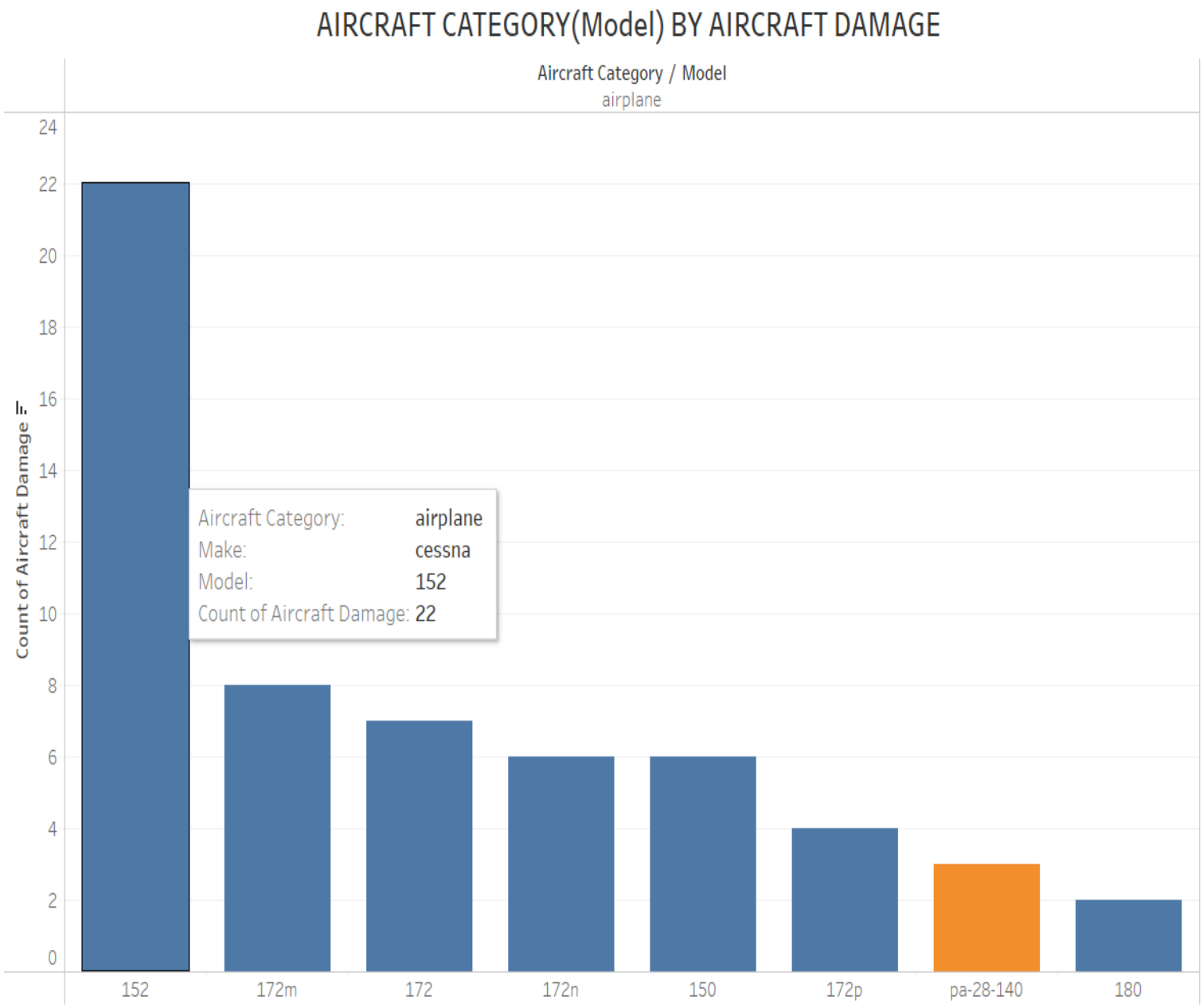
Data Understanding

- We going to go into the deep dive of this data and see what are the factors that are cause the accidents.
- The data used below was analyzed and cleaned to provide relevant data.

PURPOSE OF FLIGHT BY THE TOTAL INJURIES

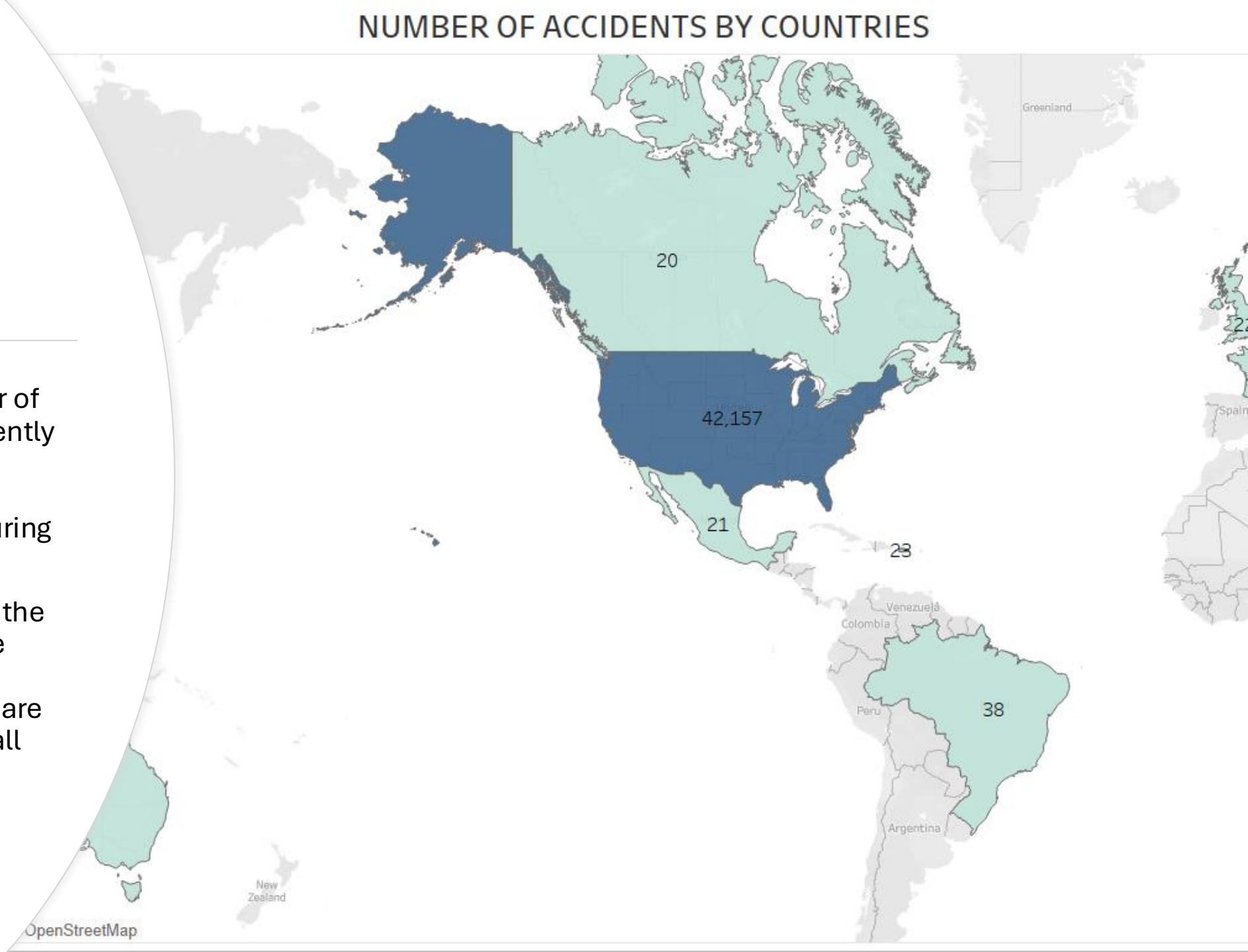


- The data presented shows the total injuries cause according to the purpose the flight with instructional flight having the most injuries because these are people who are learning to operate aircrafts so mistakes are bound to happen.
- This is followed by positioning of the flight.



- This data show the aircraft damage done in terms of the model which was between the Cessna and the Piper models and the visuals reveals that the Cessna model experiences more damage compared to the piper model . This shows how the Cessna model does not receive services to keep their aircrafts safe for use

- The map shows the number of accidents that occur frequently in the countries with North America having very high numbers of accidents occuring per year.
- This has been discussed in the previous data set where the aircrafts that are poorly managed are the ones that are in most use which causes all these accidents.



Reccomendations

Based on the data analyzed and presented some of the recommendations I would provide:

1. Safety Improvements like servicing the aircrafts and regular check-ups before take offs and landing.
2. Policy changes such as increased funding to the airports so that they can improve on the safety of the aircrafts.
3. Introduction to AI would also benefit the airports and aircrafts as it will make it easier to identify problems and solve them.

THANK YOU

- Any Questions ?

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