PROJECT 1: Aviation Safety Analysis Report

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OVERVIEW

This Project is aimed at analyzing an Aviation Dataset compiled for many years involving Aircraft accidents. The main objective is to give insights on the risk patterns, damage levels, Aircraft makes and survival percentages over the years.

PROBLEM STATEMENT

The end goal will be to help make good decisions as the company ventures into aviation Industry by the use of the analyzed data at hand and also to shine light on the risks associated with the venture.

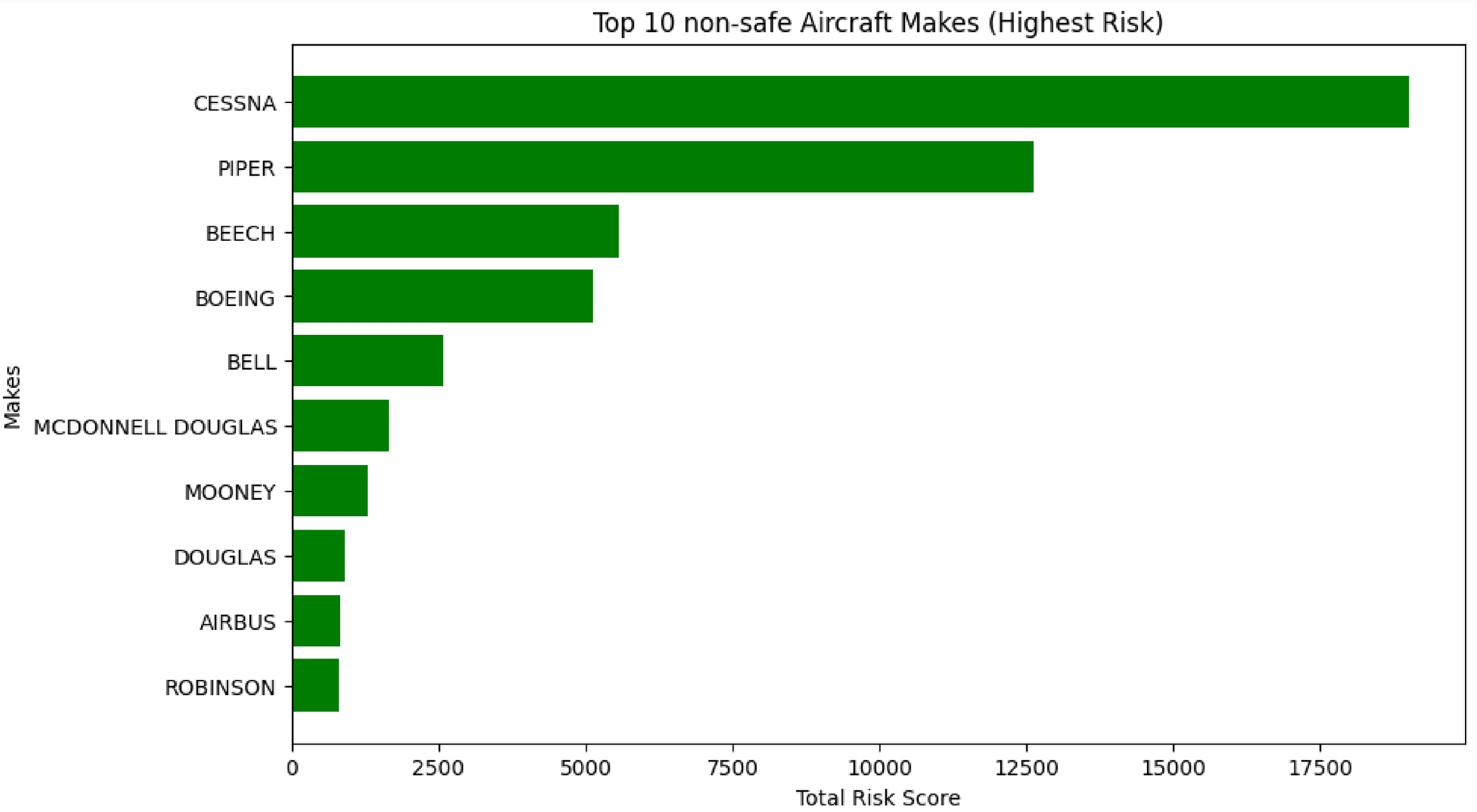
DATA UNDERSTANDING

Initially the dataset contained a lot of columns but for analysis purposes the most vital were use.

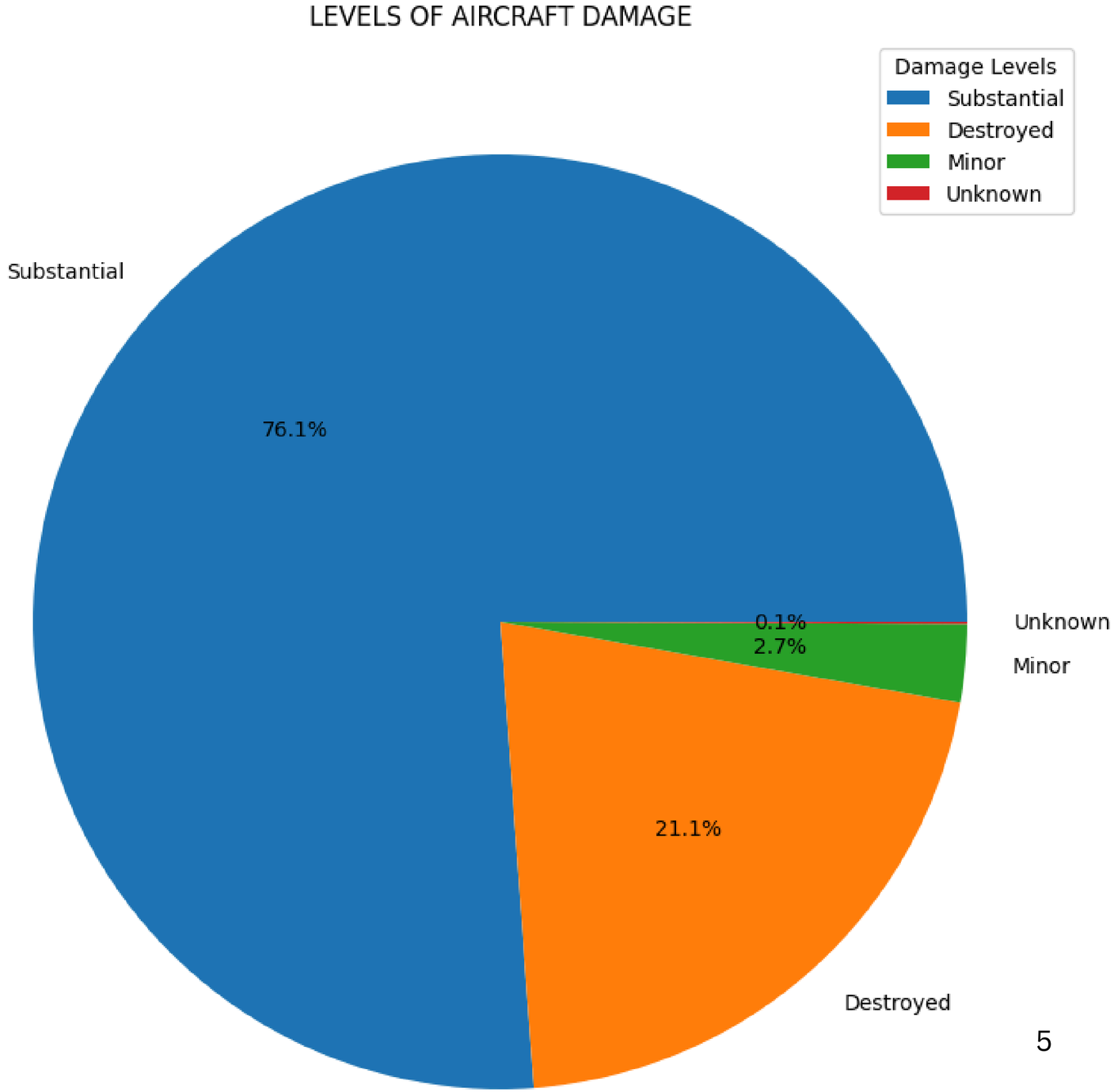
The vital columns were:

- Make - This is the type of aircraft involved in the accident.
- Aircraft damage - This is the column which contains the classification based on the aircrafts damage.
- Injuries - This is the column which gives details on the total number of injuries from a particular Aircraft.
- Date - This is the column which contains the date in which the accident occured

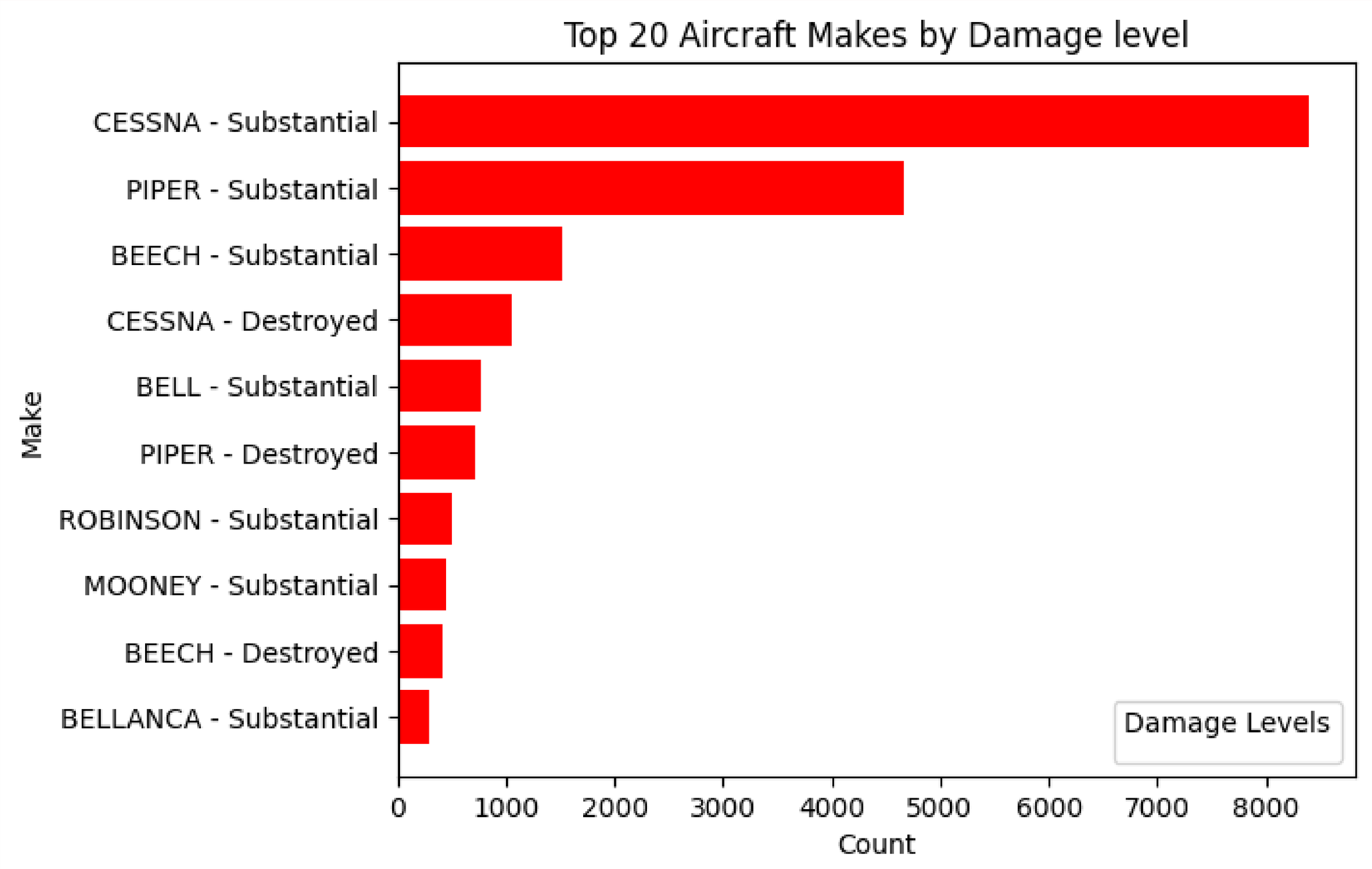
Goal 1:analyze the Aircrafts makes which have recorded the highest risks based on the total number of injuries reported



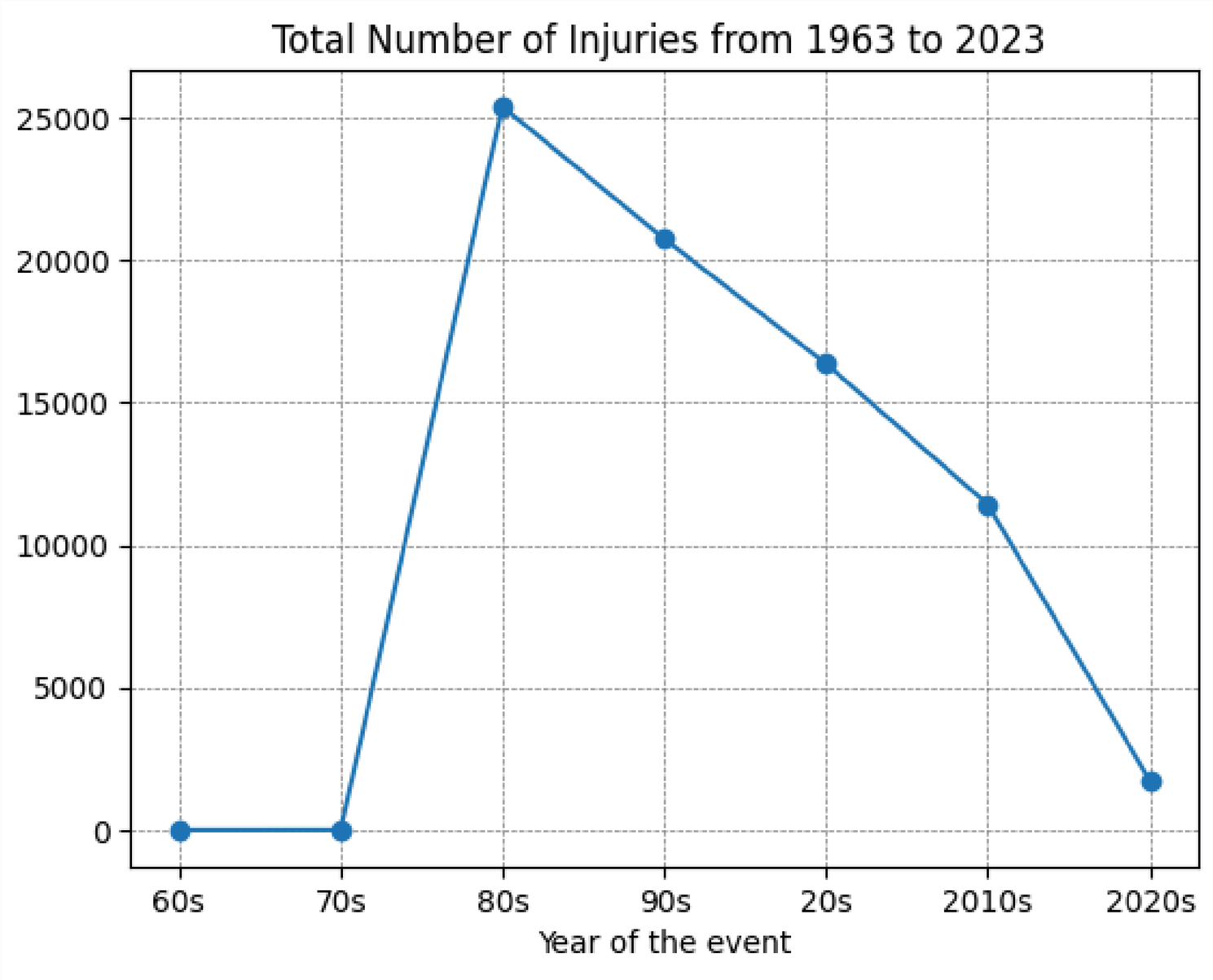
GOAL 2: To find out the levels of damage on Aircrafts After Incidents/Accidents



GOAL 3: Find out the damage levels Among the top 10 most popular Aircrafts



Goal 4:To Find out the Trend in the Total Number of Injuries Throughout the Years to the Present Year



CONCLUSION

The main goal was to find out the risks associated with aviation industry as the company tries to look into the type of aircraft to invest in. Some of the key findings were:

- Total number of injuries has significantly dropped over the years with the highest injuries recorded in the 1980's meaning they can be linked to the old models.
- Throughout the years aircrafts which have suffered substantial damage are 76% with 21% being totally destroyed.
- Makes like Meyers and Michael’s had low risk rates.
- Avoid Aircraft makes from 1980 to 1990 as that is when most accidents were reported.

RECOMMENDATION

- From the latest technology (2000 onwards) consider aircrafts from the Michaels' and Meyers Company's as they have the lowest reported accidents.

- Avoid makes which have recorded the highest risk rate ,which is based on the number of total injuries.

- Consider makes from 2000 to date as the number of reported accidents have significantly reduced in this years.

THANK YOU
FOR
YOUR TIME