AIRCRAFT SAFETY ANALYSIS

Aircraft Safety Evaluation Relating to the Shipping Industry

Shannon F. Hunley

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OVERVIEW

- Our company is interested in expanding into the shipping industry, necessitating purchasing and operating cargo airplanes for shipping purposes.
- Since we are unfamiliar with potential risks of different types of aircraft, we need information on which aircraft present the lowest risk prior to making purchasing decisions.

DATA AND METHODS

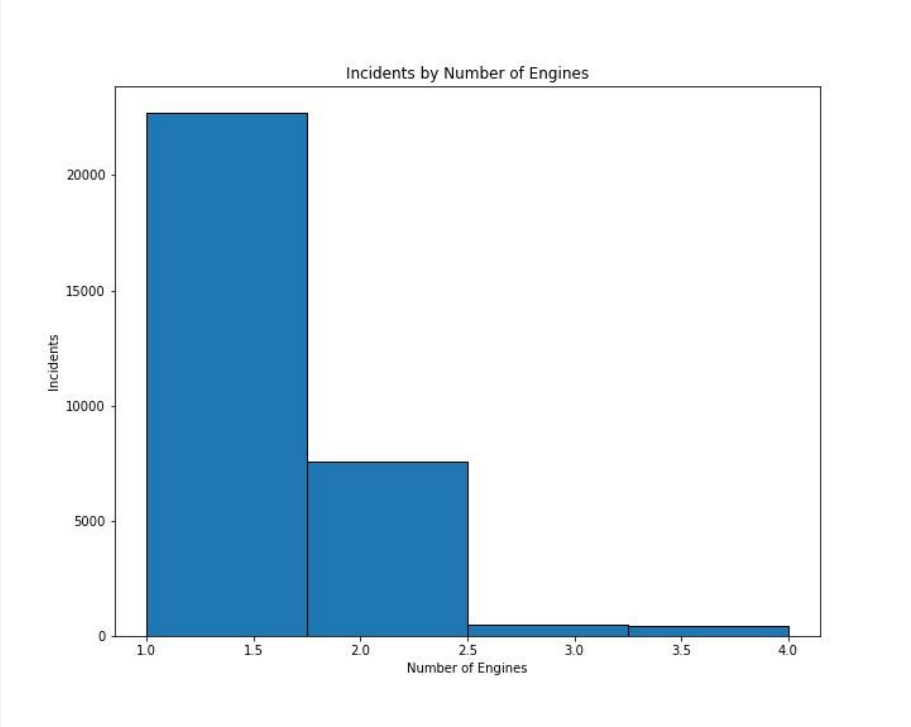
- We are using a dataset provided by the National Transportation Safety Board which includes aviation accident data from 1962 through 2003 about civil aviation accidents and selected incidents in the United States and international waters.

- Includes aircraft information such as make and model, number of engines and engine type, aircraft damage, and more.

INCIDENTS BY NUMBER OF ENGINES

Single engine aircraft overwhelmingly account for the greatest share of incidents.

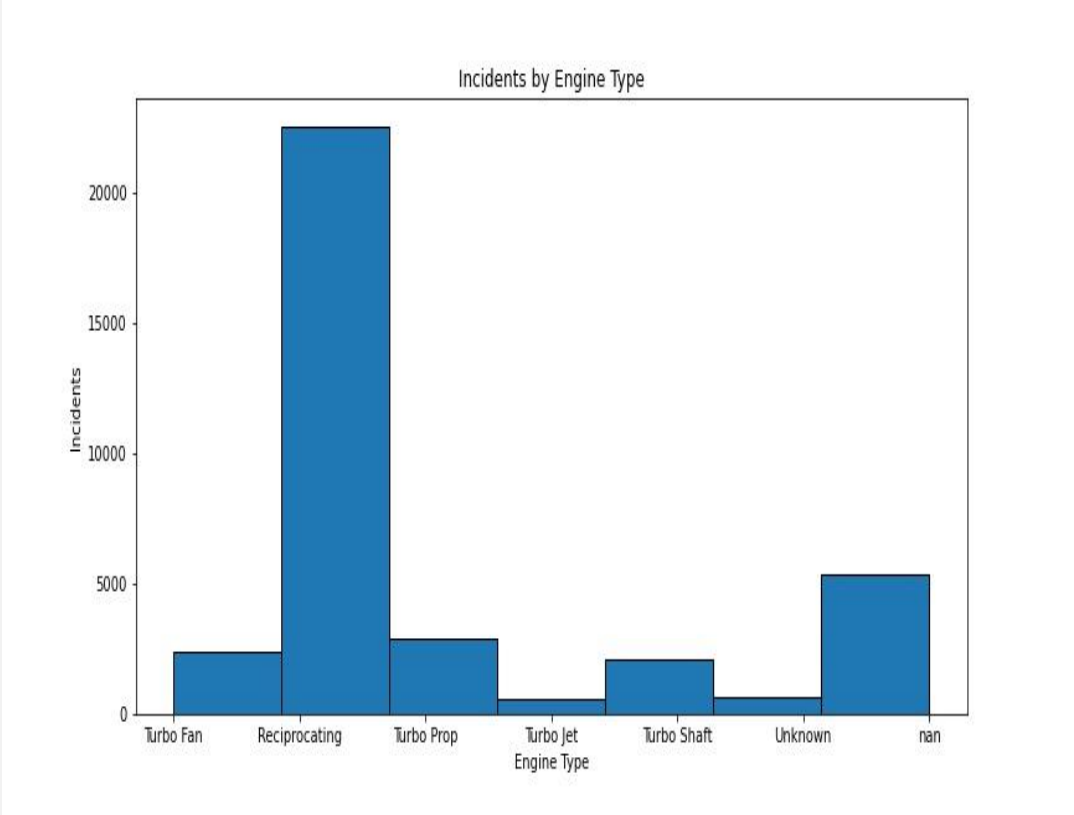
The more engines, the better, but it is most important to avoid single engine aircraft.



INCIDENTS BY ENGINE TYPE

Reciprocating engines account for the greatest share of incidents.

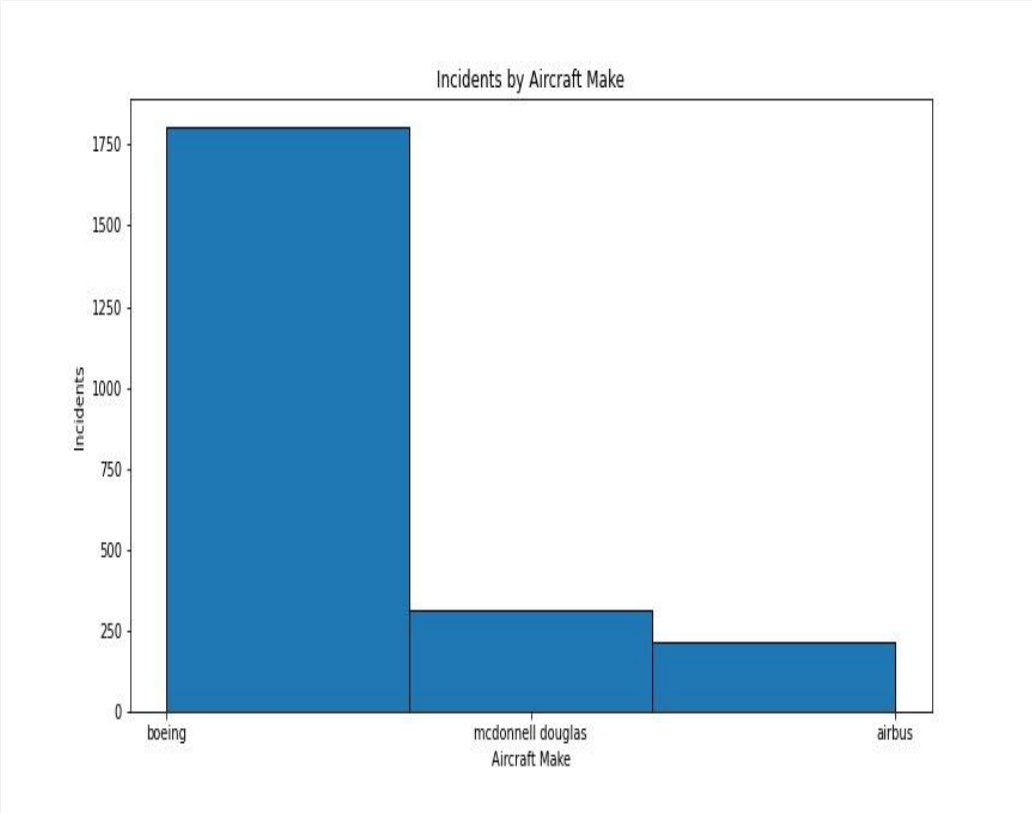
Turbo jets look best, but we can make great strides in safety by simply avoiding reciprocating engines.



INCIDENTS BY AIRCRAFT MAKE

We eliminate incidents resulting in substantially damaged or destroyed aircraft for safety.

We are left with Boeing and Airbus as the safest aircraft available (McDonnel Douglas = Boeing).



CONCLUSIONS

- Aircraft with multiple engines are recommended.
- Non-reciprocating engines are recommended.
- Boeing and Airbus made aircraft are specifically recommended for safety.
- The dataset outlines "selected" incidents only and does not include information on the total number of aircraft or total flights, leaving room for more precision using a more complete dataset.

NEXT STEPS

- Evaluating aircraft value for cost
- Evaluate ease and cost of service and repair
- Evaluate ability to modify for business purposes, since these considerations will factor into choosing aircraft to purchase.

Thank you!

Email: Shannon.f.hunley@gmail.com

Github @sfp13VA

LinkedIn: linkedin.com/in/Shannon-hunley