Fortune INC

Business Expansion

- Objective: Expand into airplane aviation to diversify portfolio with Phase 1 expansion
- Focus: Evaluate which aircrafts and aircraft specifics pose the lowest risk as we venture into a brand new industry
- Criteria
  - Identifying the industry standard for aircraft make and model
  - Identify top make and model results in least number of destroyed aircrafts during accident events to account for easier financial maintenance
  - Identify which type of engine is the industry standard for identified make and model and corresponds to the least number of fatal injuries

Data Source

- NTSB Aviation accident data from 1992 to 2023

  30 years+ civil aviation accident events records from the NTSB

- Filtered from original 1962-2023 dataset
  - Brief History of Aviation Regulations
  - Best Selling Airplane
  - VMC/IMC Wikipedia

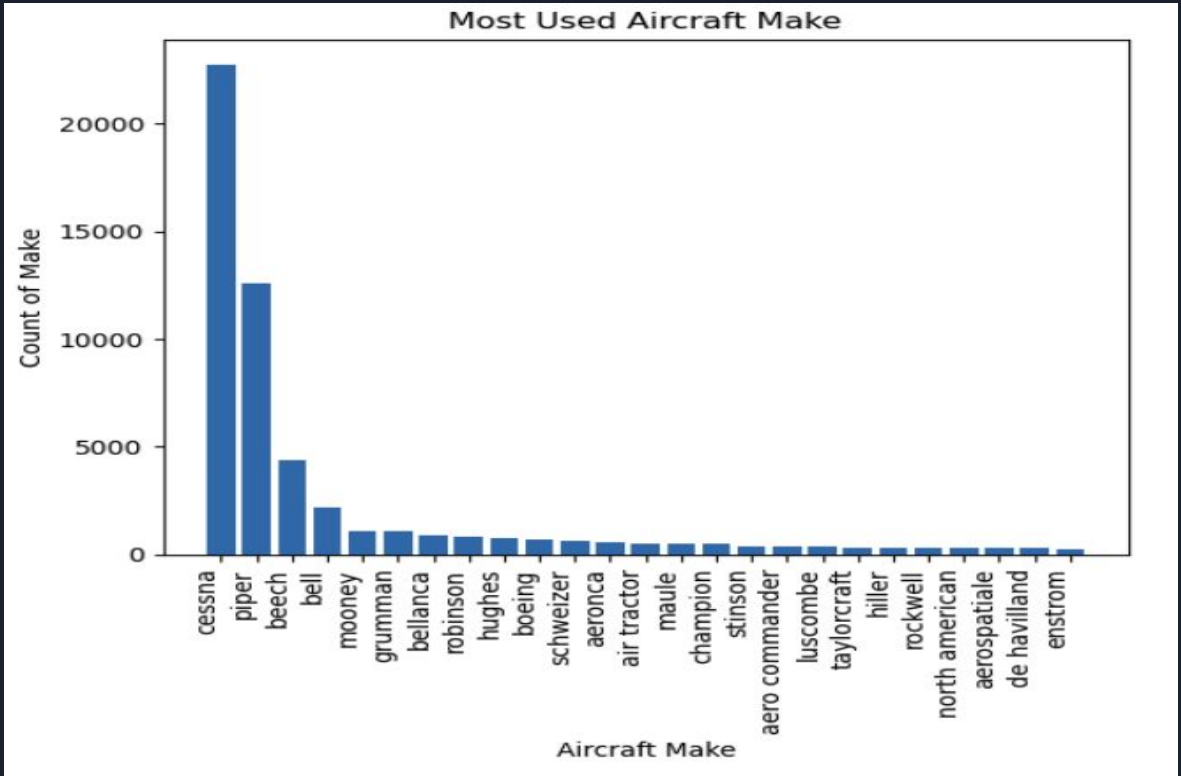
NTSB dataset focused on most recent 30 years provides sufficient aviation accident data for analysis

Addressing the Problem

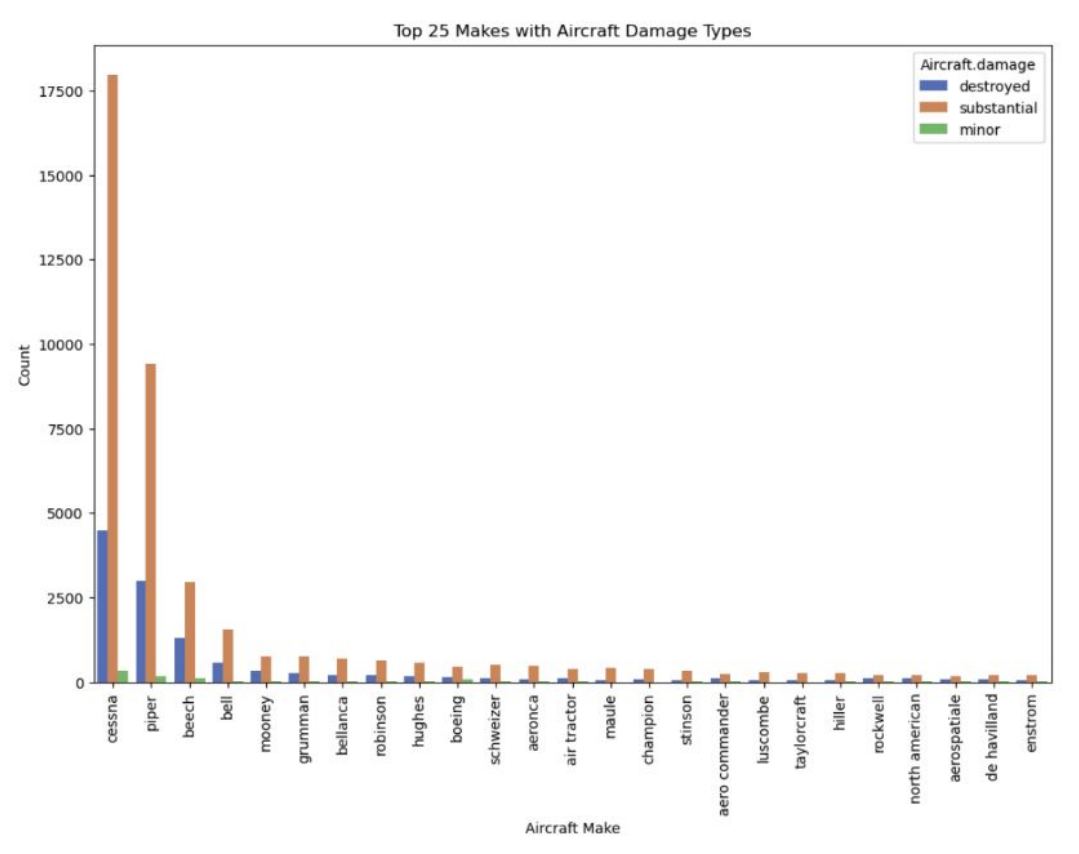
Some preliminary questions include:

- *What type of aircraft make and model the most sense to purchase first when considering industry standard and which engine types are associated with identified make and model?*
- *How is type of engine related to total injuries during accident events as related to identified industry standard make and model?*
- *Have there been improvements in aviation technology and regulation helping us determine which event years provide relevant data?*

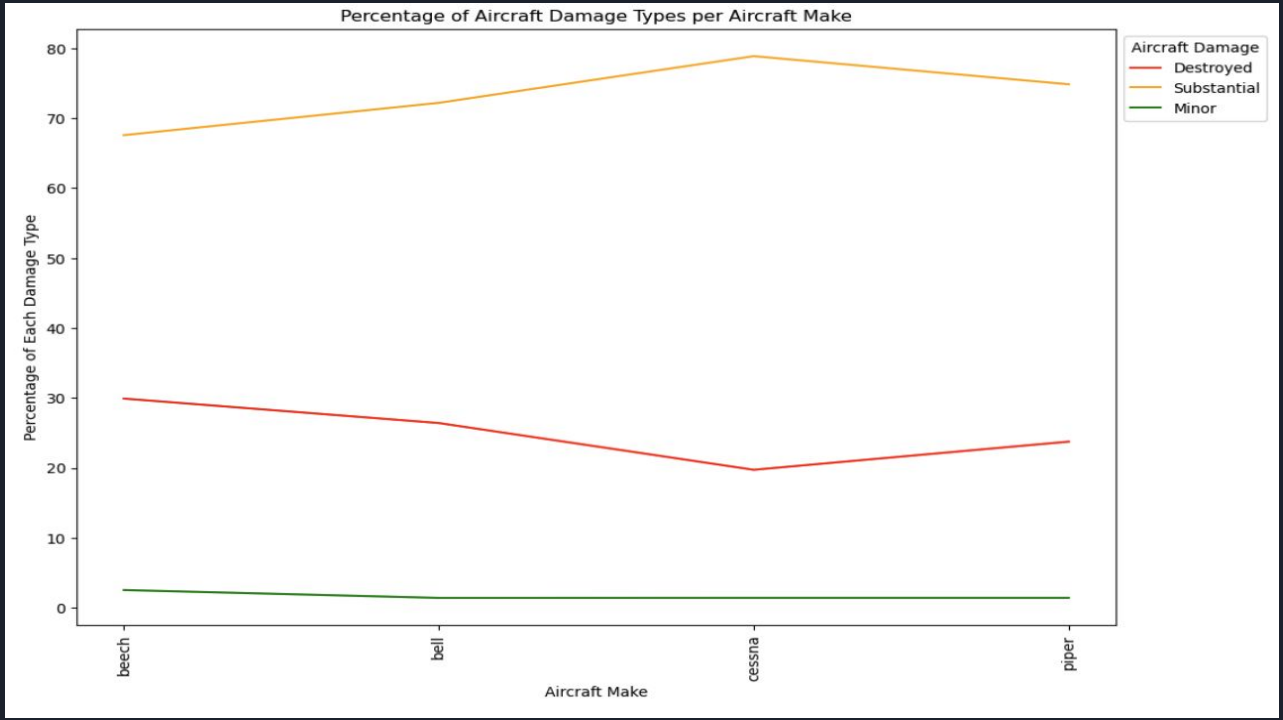
Top 25 Most Used Aircraft



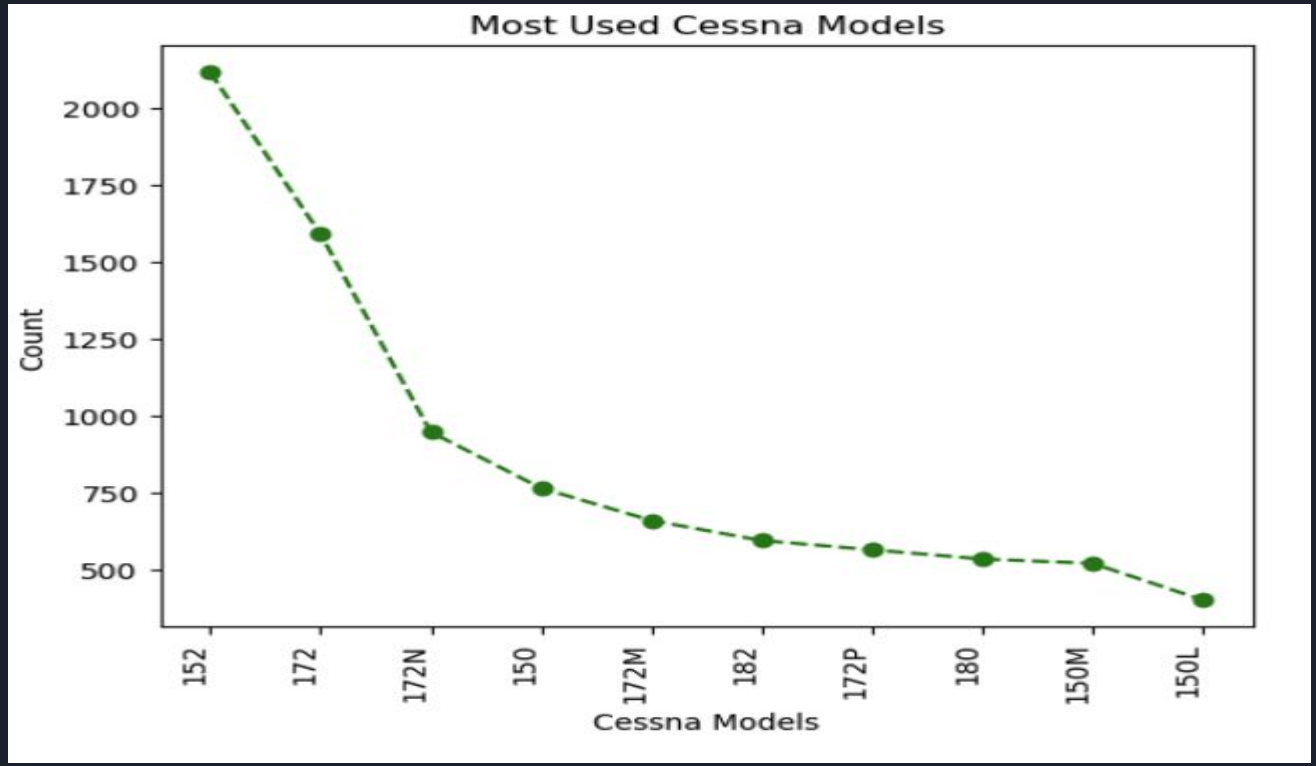
Top 25 with damage type



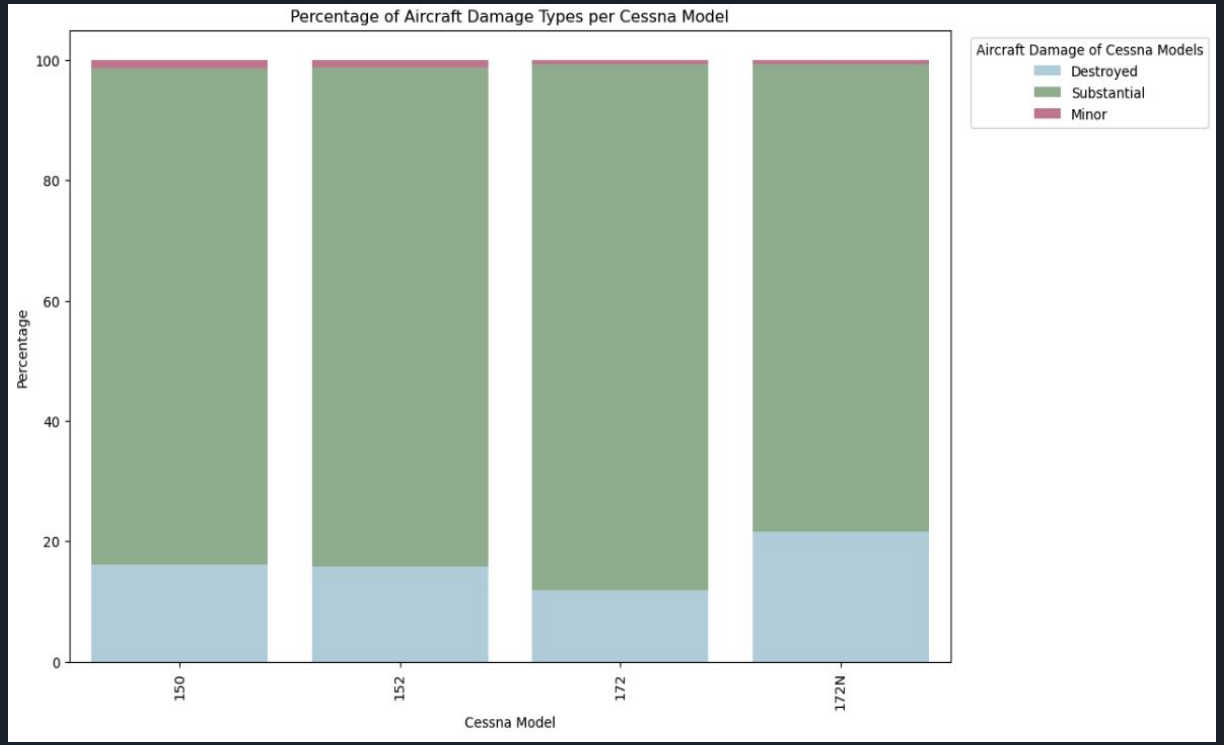
Top 4 Makes Damage Types



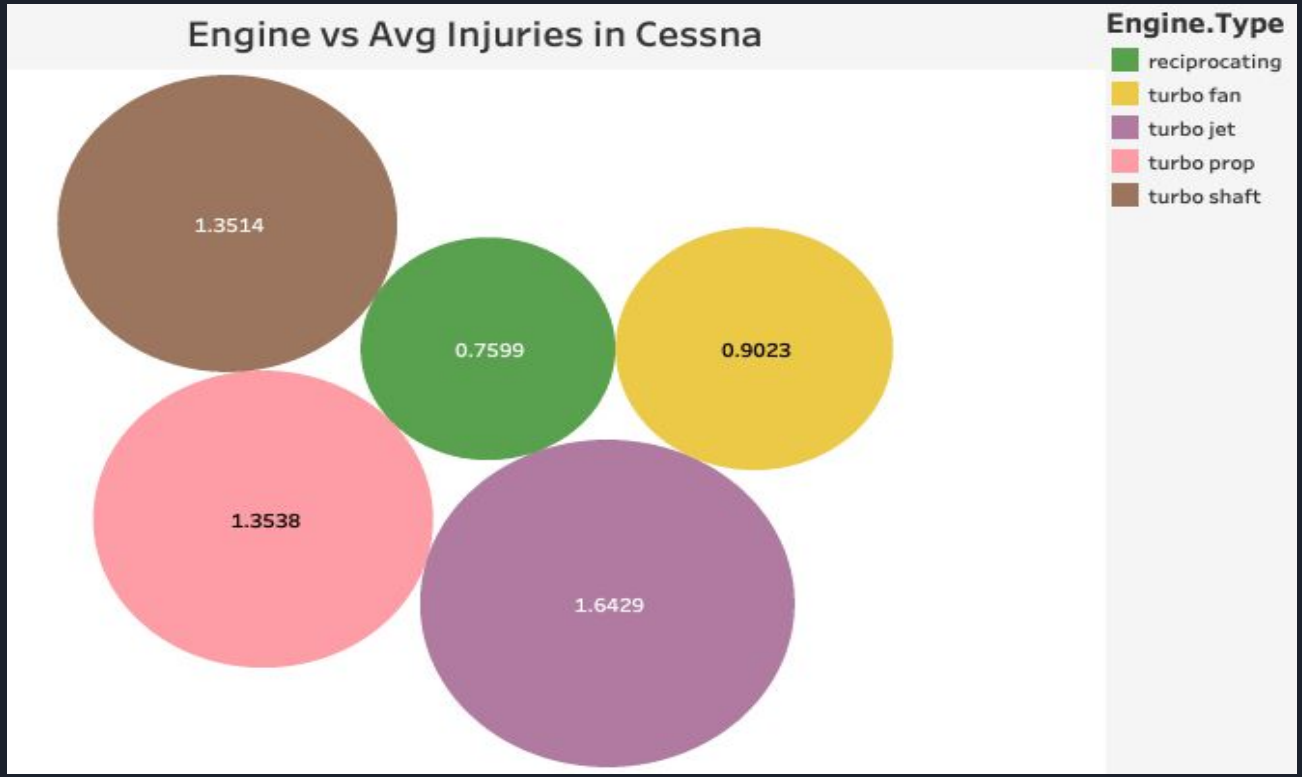
Most used Cessna Model



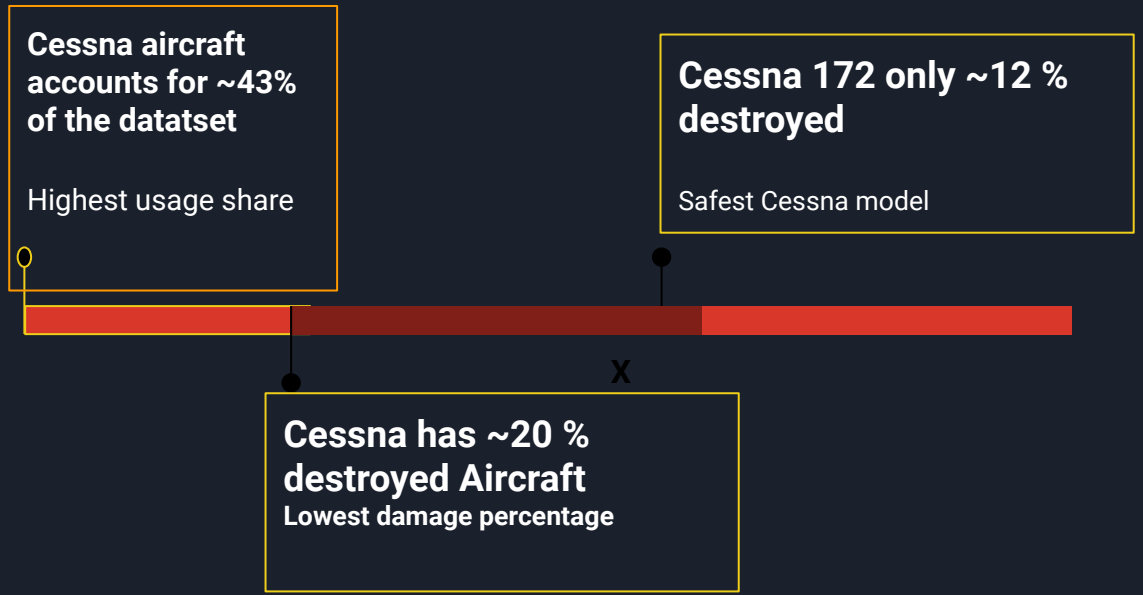
Aircraft Damage for Cessna models



Engine type compared with Injuries



Data Evaluation



Conclusion and Recommendations

01	**Recommended Make**	• Cessna Airplanes
02	**Recommended Model**	• Cessna 172
03	**Recommended Engine**	• Reciprocating Engines
04	**Safety**	• Cessna 172s with reciprocating engines have the lowest accident rates
05	**Reliability**	• Cessna is the lowest risk regarding low cost maintenance less damage and injuries in accident events

Phase 2

- *For Phase 2 with more data research we can analyze cost effectiveness and filter out the aircrafts according to the spending budget.*
- *We can also introduce safety protocol training to even lower the risk.*
- *Safety protocol training will include looking at locations that resulted in least amount of aircraft damage and total injuries.*
- *Also will include training for method of flying whether VMC or IMC to lower the risk of accidents.*

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