




# Airplane Risk Analysis

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# OBJECTIVES

To diversify the business' portfolio by expanding into the commercial and private use airplane industry



Determine which planes are  
safest for commercial and  
private use.

Overview potential risks  
for the company in this  
new business endeavor

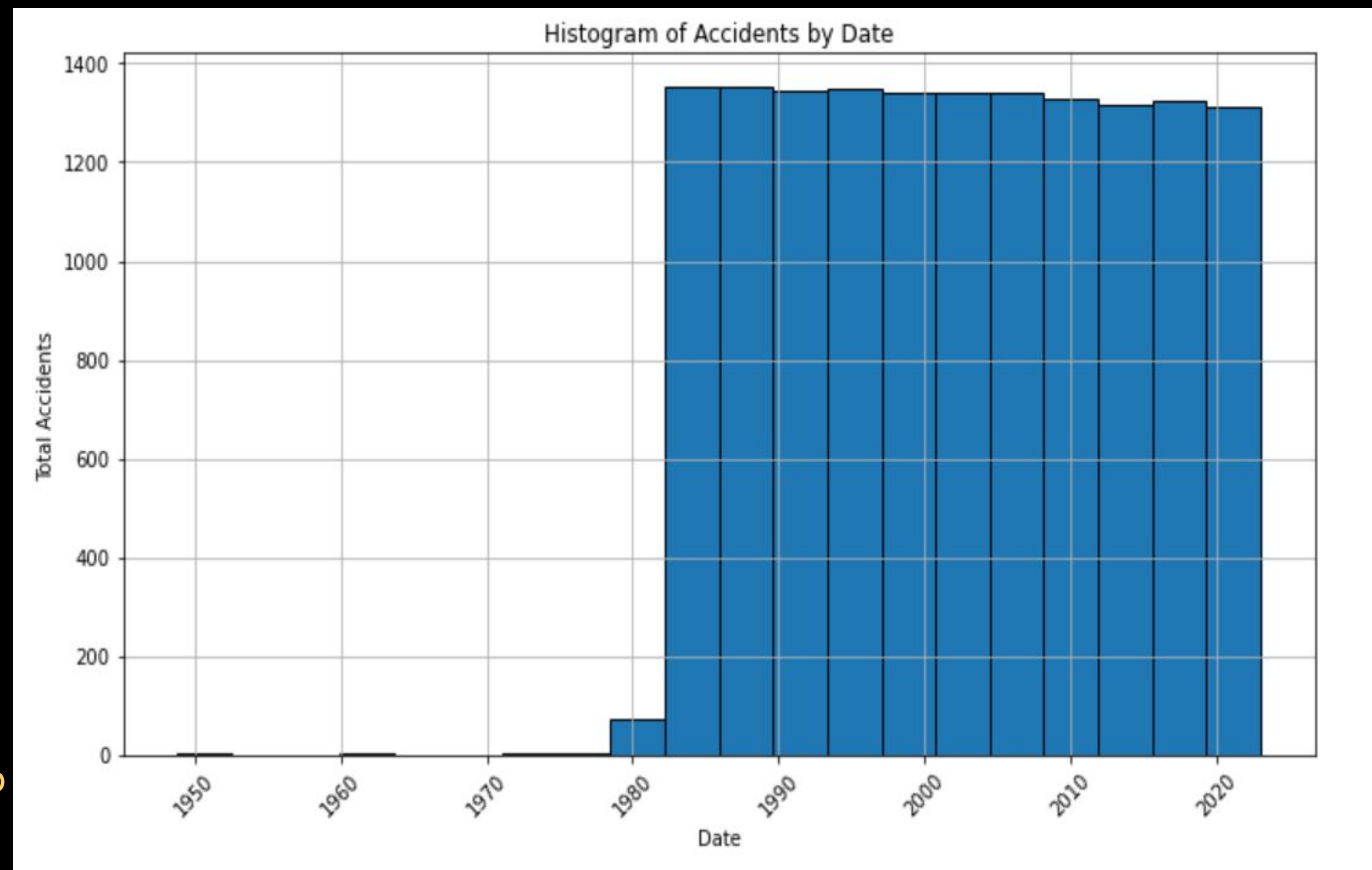
Give recommendations  
for investing in this new  
sphere

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# INTRODUCTION: DATA



Data gathered by National  
Transportation Safety  
Board taken from  
Kaggle.com  
"Aviation Accident  
Database & Synopses, up to  
2023,"

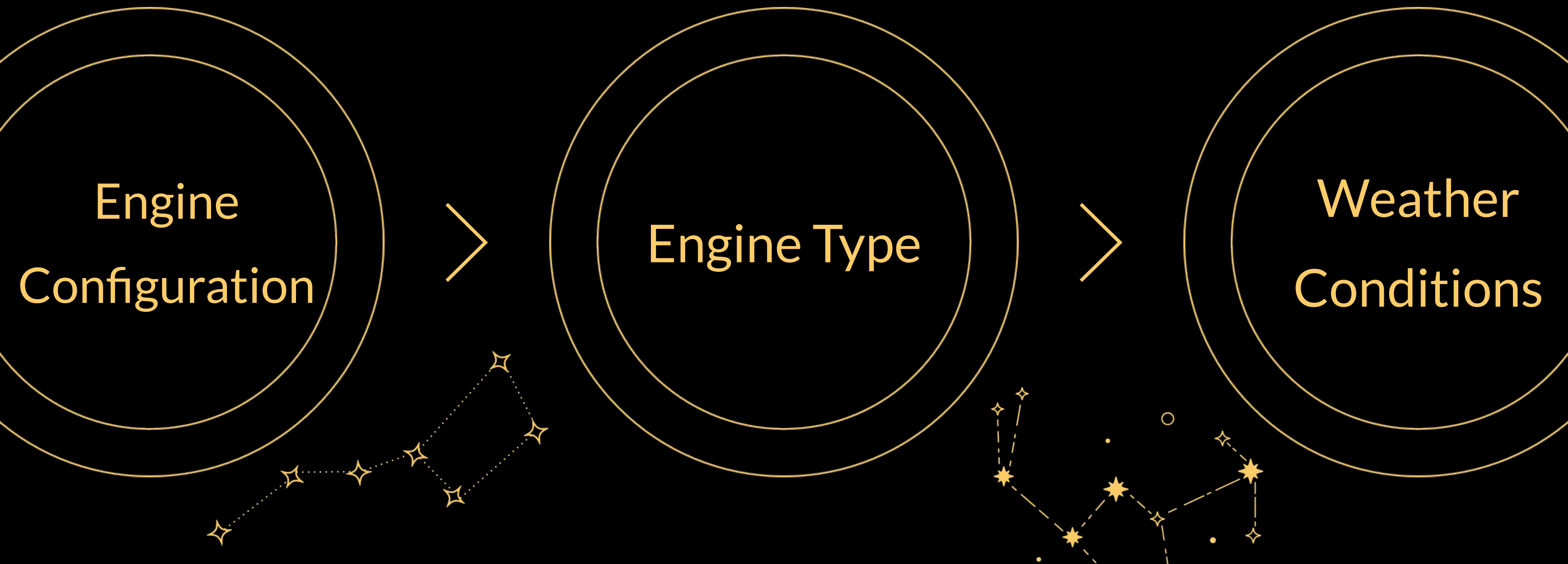


Includes aviation accident  
data from 1962 - 2023  
about civil accidents

Only slight reduction in  
injuries over time

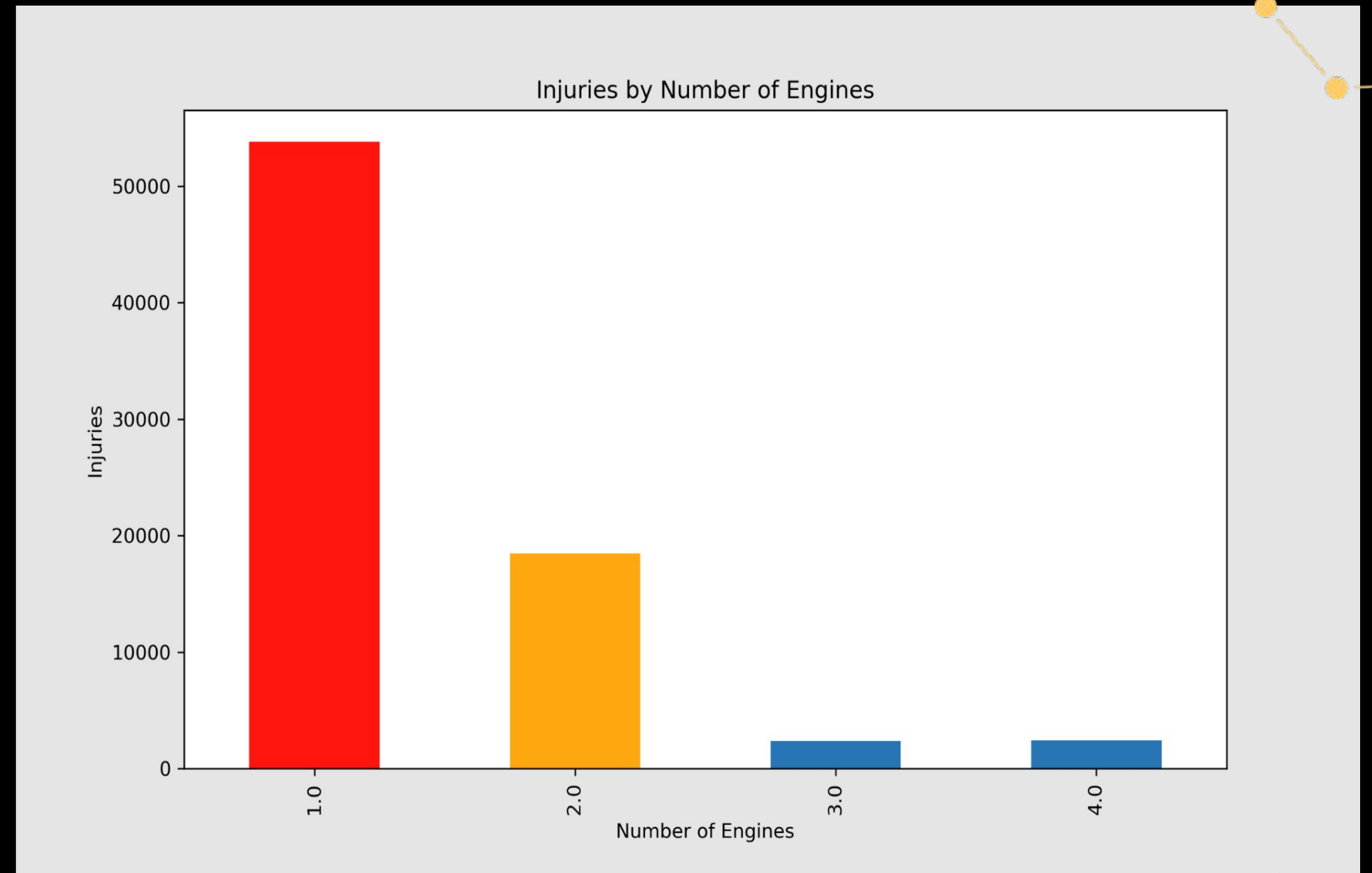
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# POTENTIAL RISKS?



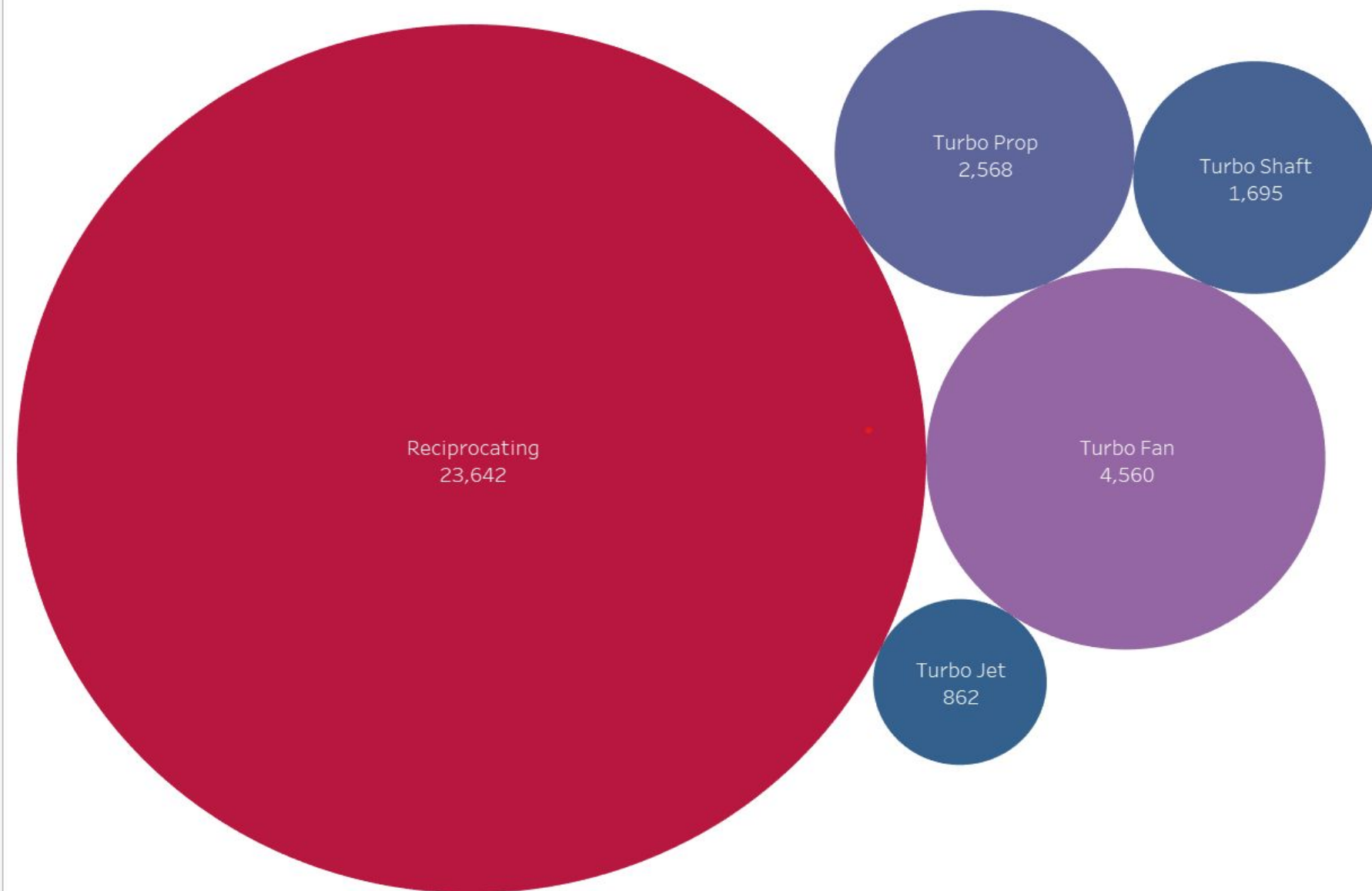
# Engine Configuration

One engine  
planes have  
**HIGHEST**  
total injuries



# Engine Types

Fatal Injuries by Engine Type



Reciprocating have **2.4X** more total fatalities than all other engine types combined

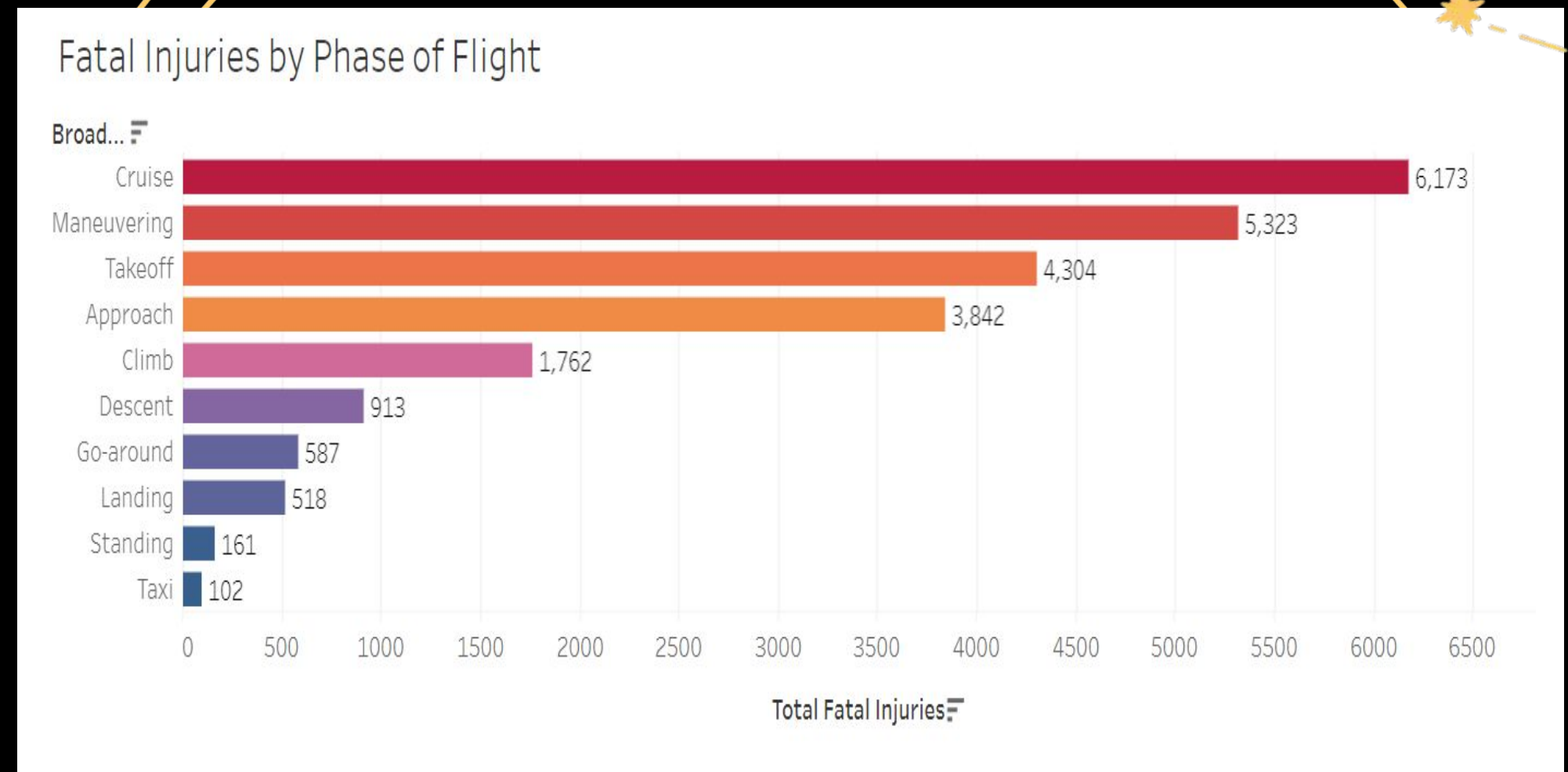


# PHASE OF FLIGHT

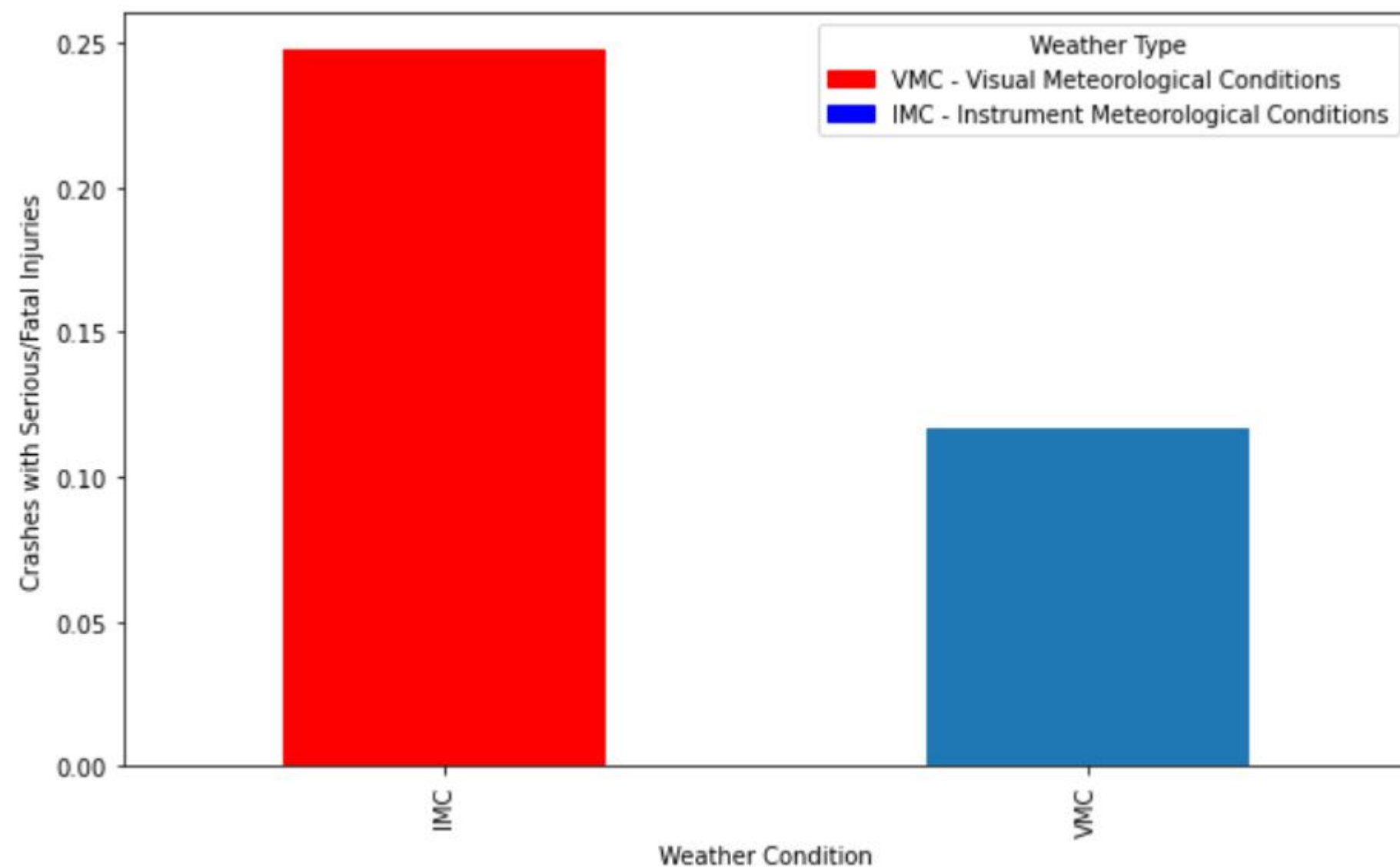
01 Cruise Phase: 6173 injuries

02 Maneuvering: 5323 injuries

03 Takeoff: 4304 injuries



# DID YOU KNOW?



CRASHES DURING IMC FLIGHTS ARE  
ALMOST **10%** MORE LIKELY TO  
RESULT IN A SERIOUS OR FATAL CRASH



# RECOMMENDATIONS/CONCLUSIONS

These are my recommendations to consider for the new fleet

## ENGINE

RECOMMENDATIONS  
WITH 3 OR MORE  
ENGINES

NO 1 ENGINE PLANES

## ENGINE TYPE

- Buy **Turbo** Engines

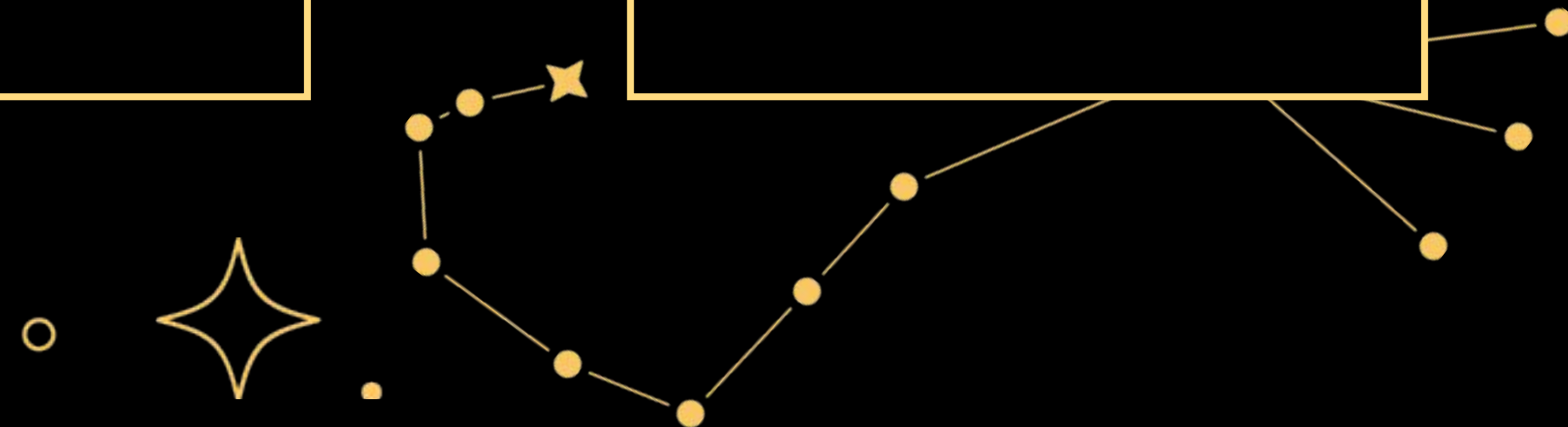
Airplanes with reciprocating engines had 2.4x higher total fatalities than all other engine types

## WEATHER CONDITION

- Increase minimum requirements for flights weather conditions to reduce amount of IMC flights

## PHASE OF FLIGHT

- Increase adherence to safety protocols particularly during: Maneuvering, Takeoff, Cruise phases



Thank You

Any Questions?

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