

# AIRCRAFT SAFETY OVERVIEW

## Yearly accidents and fatal injuries trend

Total accidents and fatal injuries dropping sharply after 2010

Year

All

Injury severity

All

Purpose of flight

All

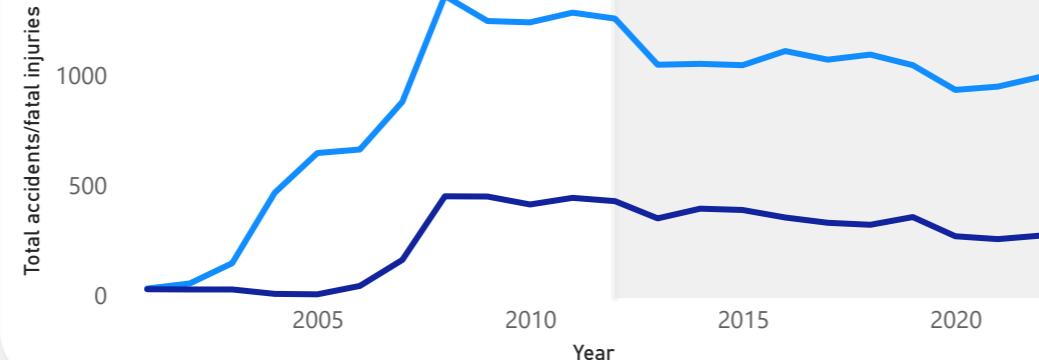
Weather condition

All

Phase of flight

All

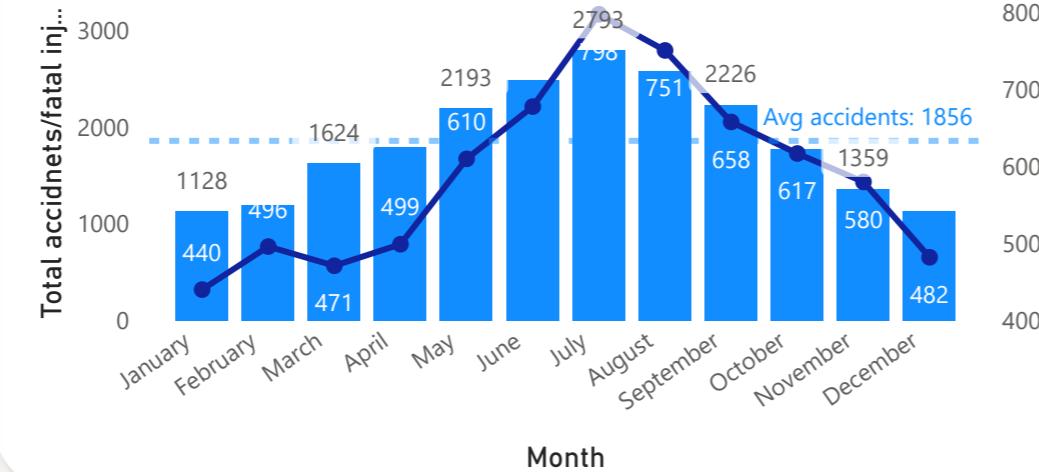
● total\_accidents ● Sum of total\_fatal\_injuries



## Monthly aviation accident and fatal injury trends

July sees the highest activity, exceeding the monthly average of accidents

● total\_accidents ● Sum of total\_fatal\_injuries



## Aircraft risk assessment

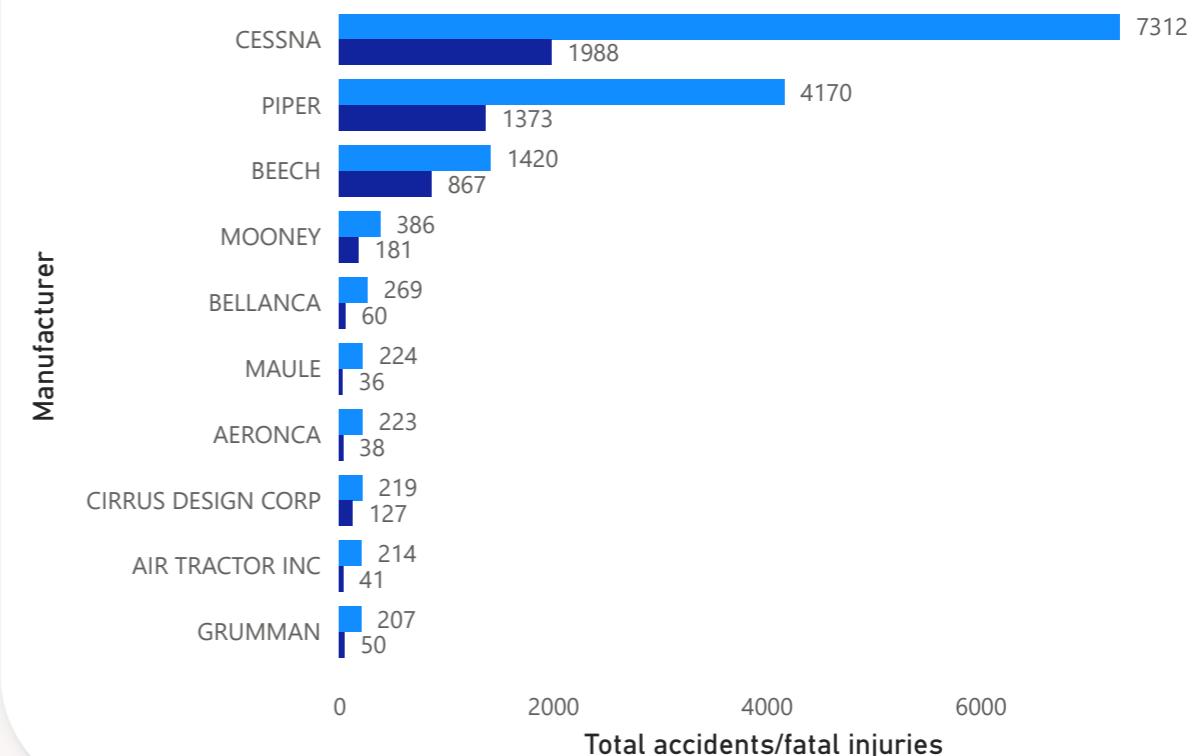
Lower scores indicate safer aircraft for investment

0.16

## Accident and fatal injury by aircraft manufacturer

Cessna leads in both total accidents and fatal injuries, followed by Piper

● total\_accidents ● Sum of total\_fatal\_injuries

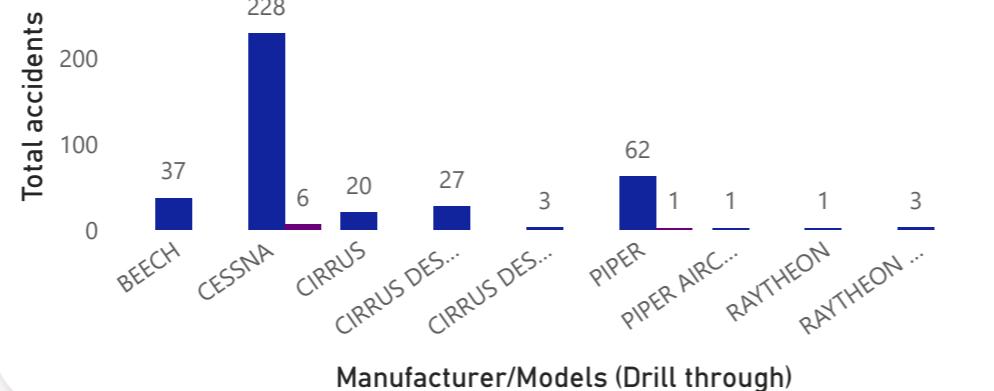


# TECHNICAL AND OPERATIONAL RISKS

## Destroyed/Minor level distribution by manufacturers and models

Cessna and Piper models have highest destroyed level damage

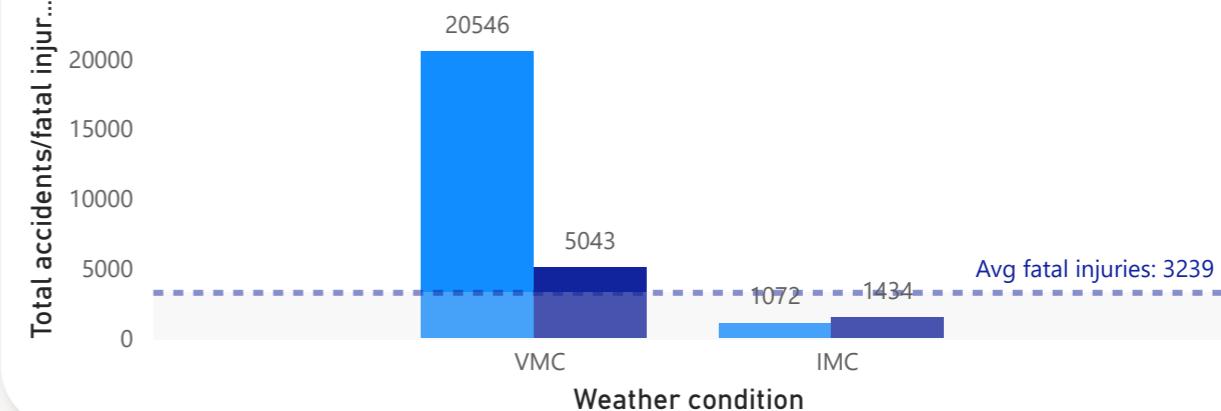
Aircraft damage ● Destroyed ● Minor



## Weather impact on accident severity

VMC conditions correlate with higher fatalities

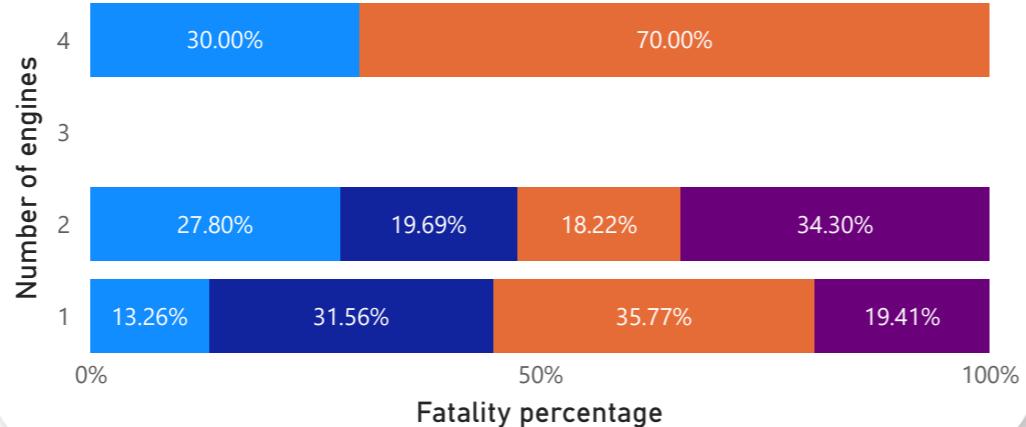
● total\_accidents ● Sum of total\_fatal\_injuries



## Fatal accidents by engine types and number

Turbo fan engines present lower risk and outperform reciprocating models

Engine type ● Reciprocating ● Turbo Fan ● Turbo Jet ● Turbo Prop



## Amateur-built vs factory-built aircraft risk

Amateur-built planes pose unacceptable risks for revenue flights

● accident\_rate ● fatality\_rate

