

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

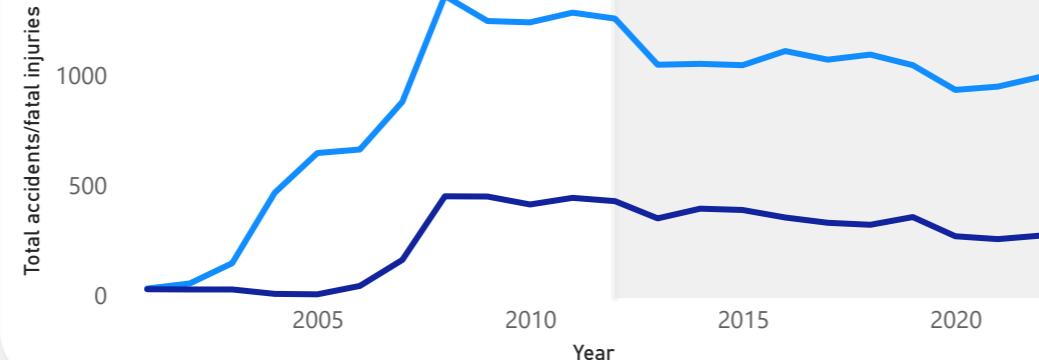
Weather condition

All

Phase of flight

All

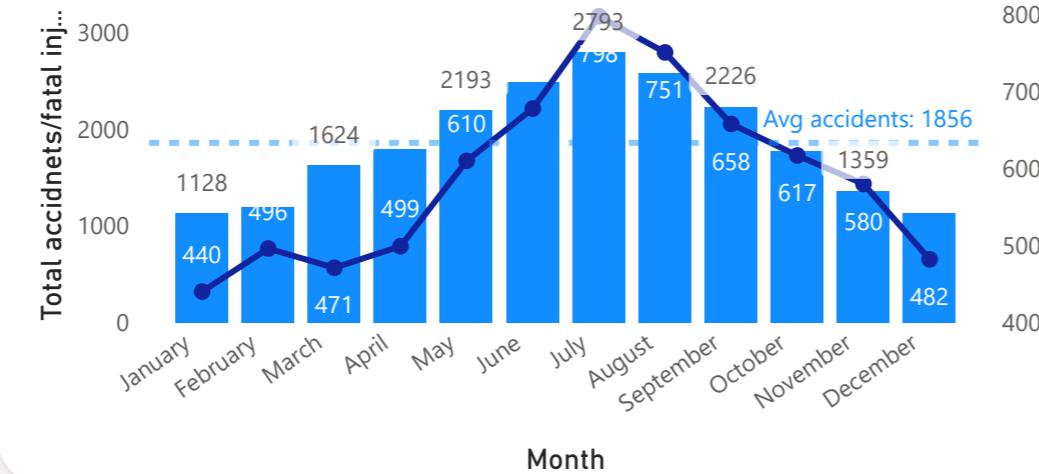
● total_accidents ● Sum of total_fatal_injuries



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

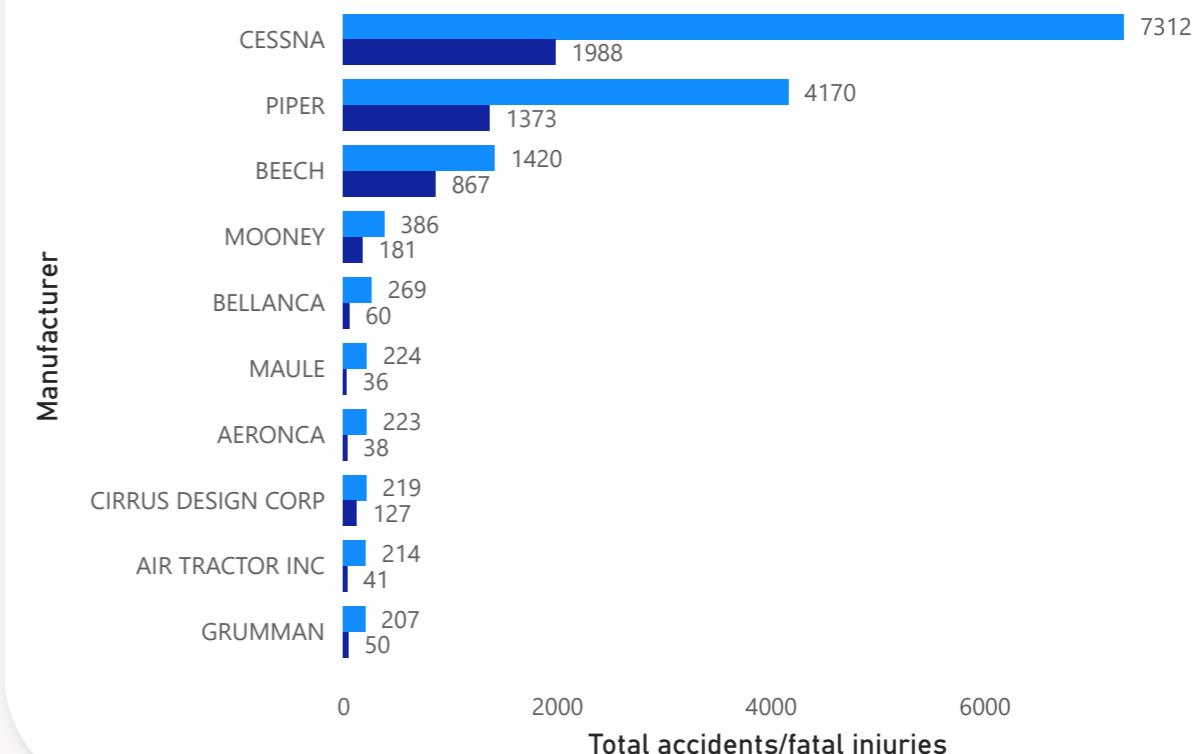
Lower scores indicate safer aircraft for investment

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

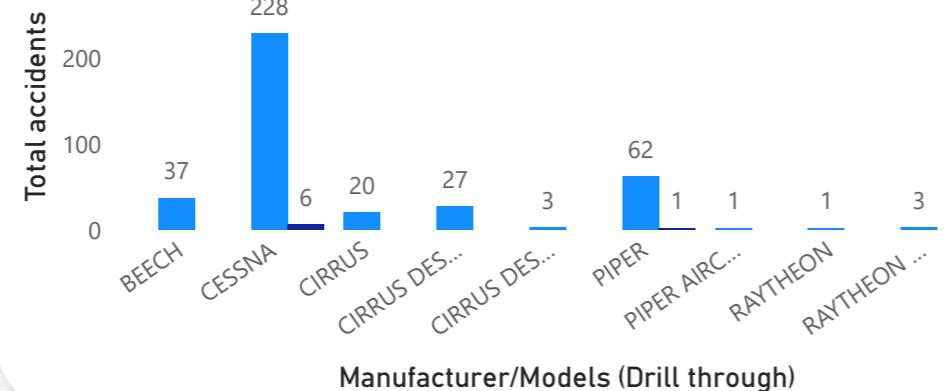


TECHNICAL AND OPERATIONAL RISKS

Destroyed/Minor level distribution by manufacturers and models

Cessna and Piper models have highest destroyed level damage

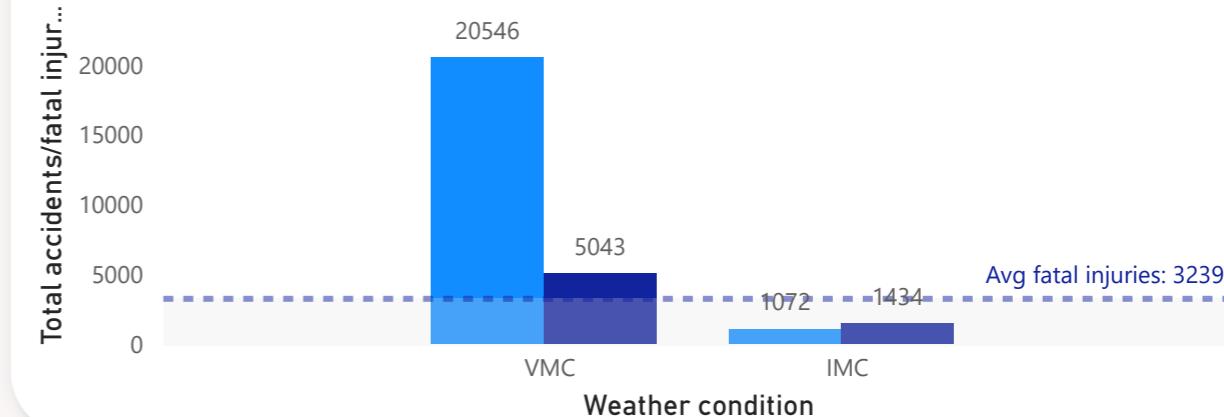
Aircraft damage ● Destroyed ● Minor



Weather impact on accident severity

VMC conditions correlate with higher fatalities

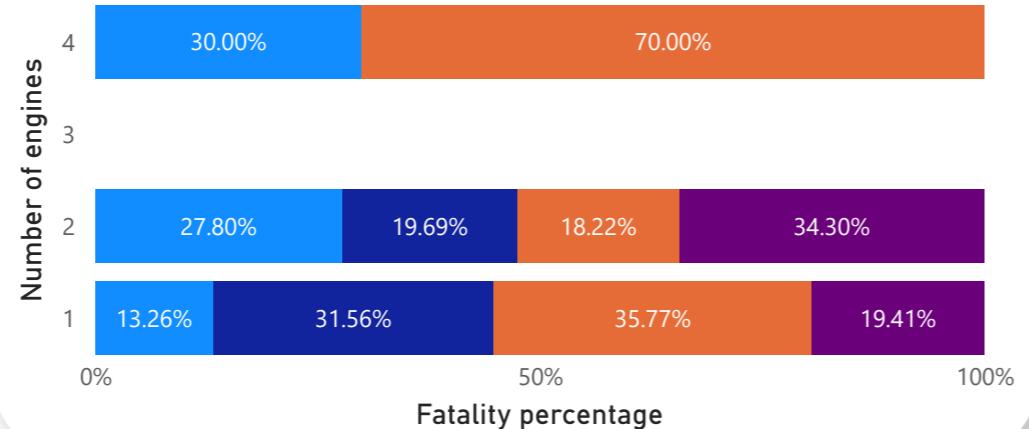
● total_accidents ● Sum of total_fatal_injuries



Fatal accidents by engine types and number

Turbo fan with 1 or 2 engines present lower risk

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

