

Minimize the Risk of Injuries and Fatalities

How StellarSkies Should Enter the Domestic Flight Market

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The Team



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Agenda

- ▶ Safety is the Problem
- ▶ Which Planes Should You Buy
- ▶ Implement a Safety Plan
- ▶ Conclusion

Safety is the Problem

Safety Lapses Can Wreck an Airplane, and an Airline



- January 5: Boeing 787 Max 9 flown by Alaska Airlines lost a door in mid-flight
- Passengers have sued Boeing and Alaska Air for \$1 billion, with more lawsuits to come

Boeing and Alaska Air Share Price, January 5th = index of 100



Data Can Help Prevent Accidents

- Reciprocating engines and single-engine planes are dangerous.
Avoid them.
- Boeing, Cessna and Bombardier have worse safety records.
Choose someone else.
- Summers and weekends are more dangerous.
Plan for that.

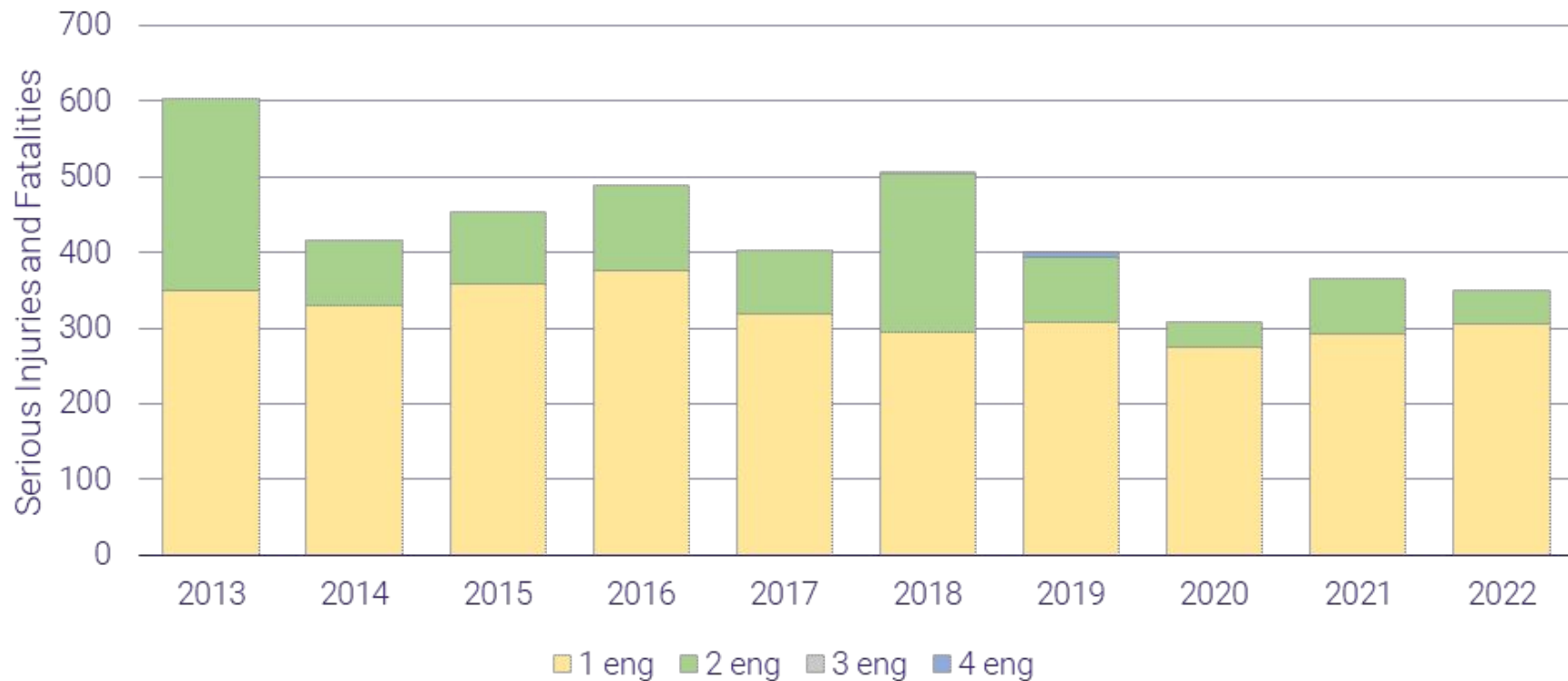
NTSB Records Show What to Avoid

- We focused on the ~7,300 incidents most relevant to a new airline
- The database is good, but not perfect
 - It only shows planes in accidents; we do not know how many flights took place overall, so we cannot normalize our data
 - It does not differentiate between hardware failures and pilot error

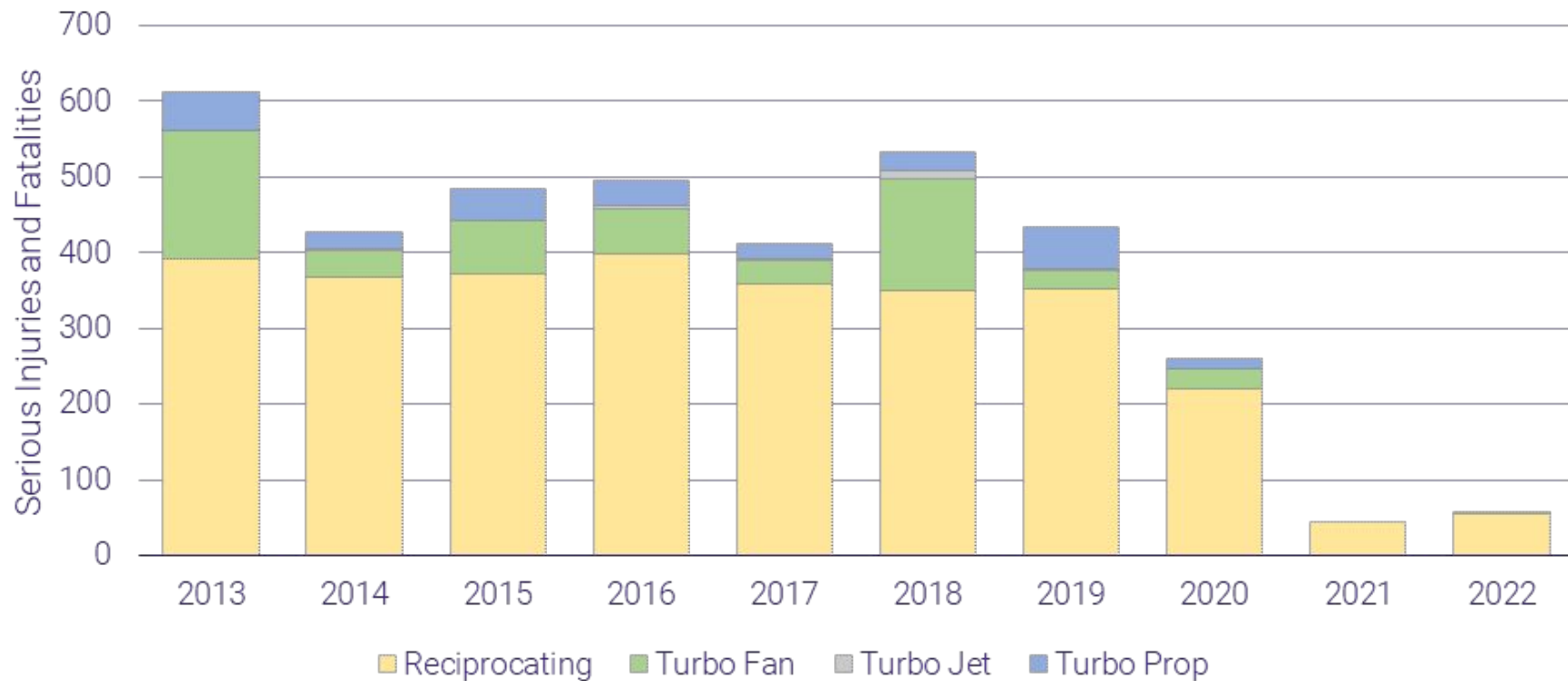


Which Planes Should You Buy

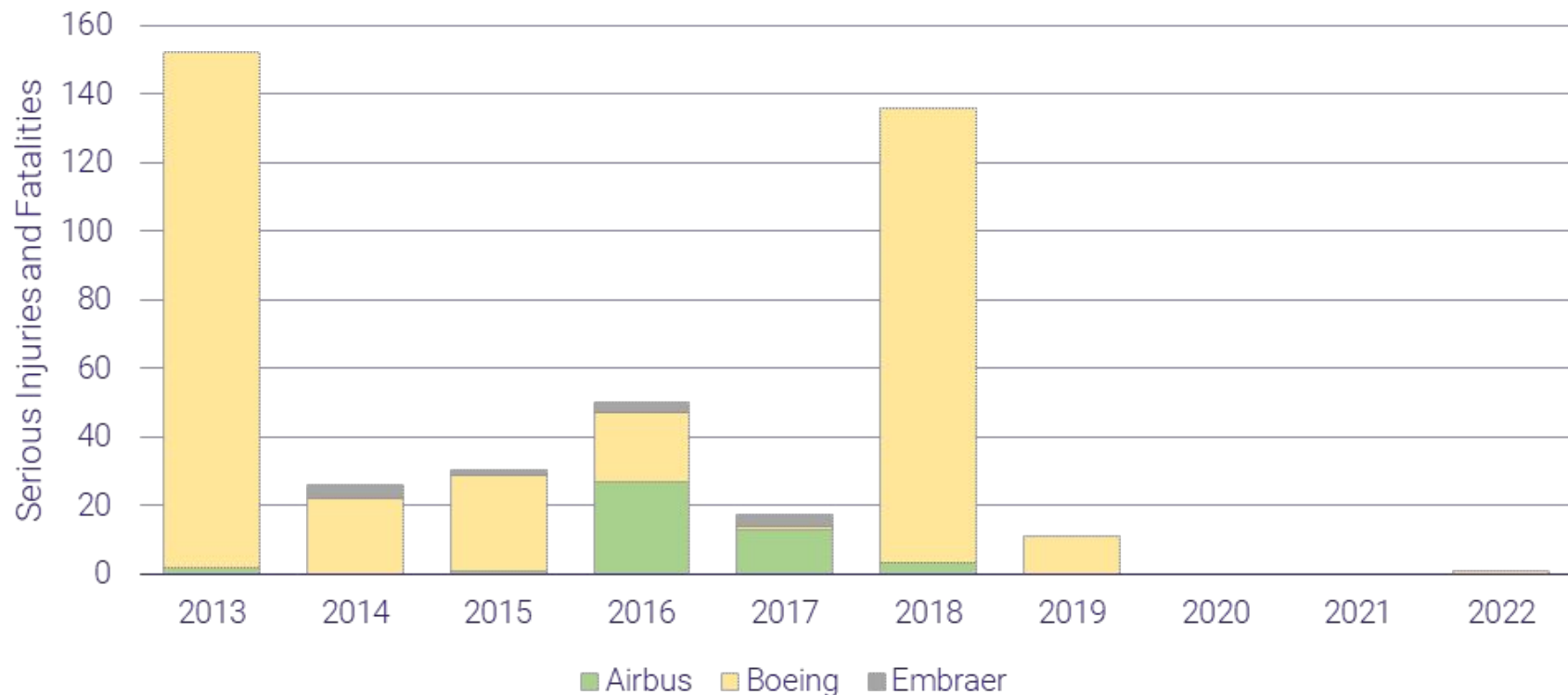
Single Engine Planes are a Problem



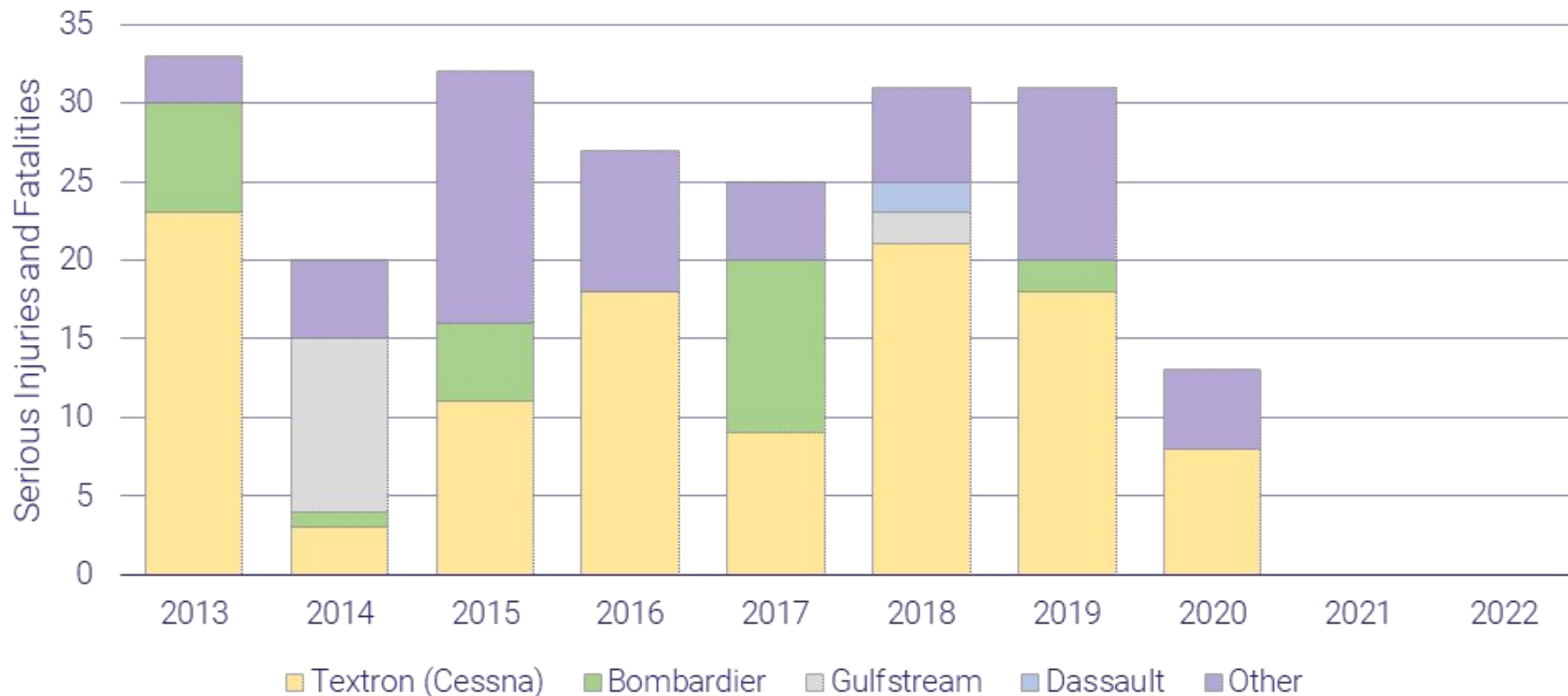
Reciprocating Engines are Too



Boeing Has Had Lots of Difficulty...



...As Have Cessna and Bombardier



Four Good Options

- Two price points in each market that can travel BOS-LAX

COMMERCIAL

- Airbus A220
 - Established operator
 - Est .Cost: \$91.5mm
- Embraer E190–E2
 - New entrant
 - Est. Cost: ~\$60mm



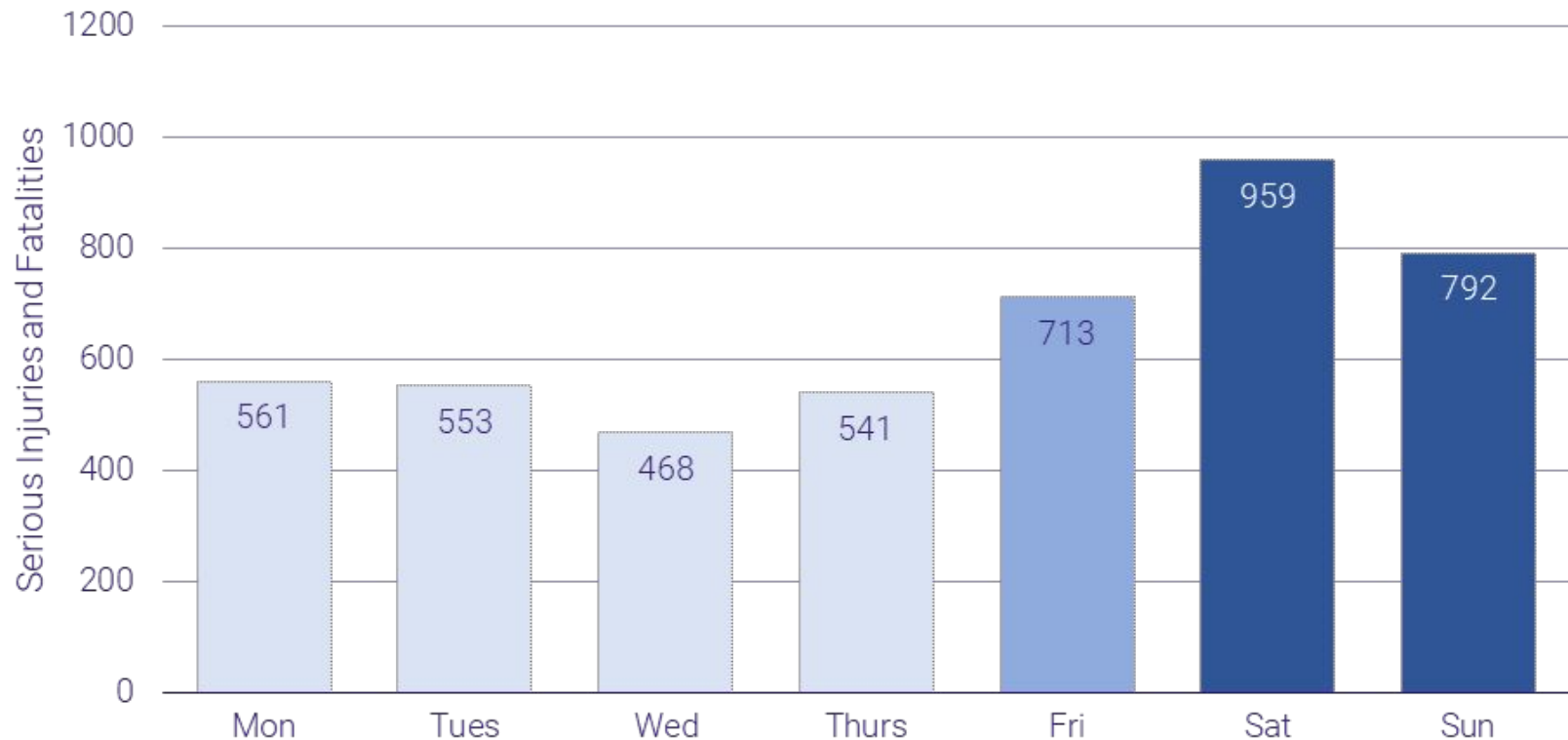
BUSINESS

- Dassault Falcon 2000LXS
 - Spacious luxury
 - Est. Cost: ~\$34mm
- Gulfstream G280
 - Smaller and lighter
 - Est .Cost: \$25mm

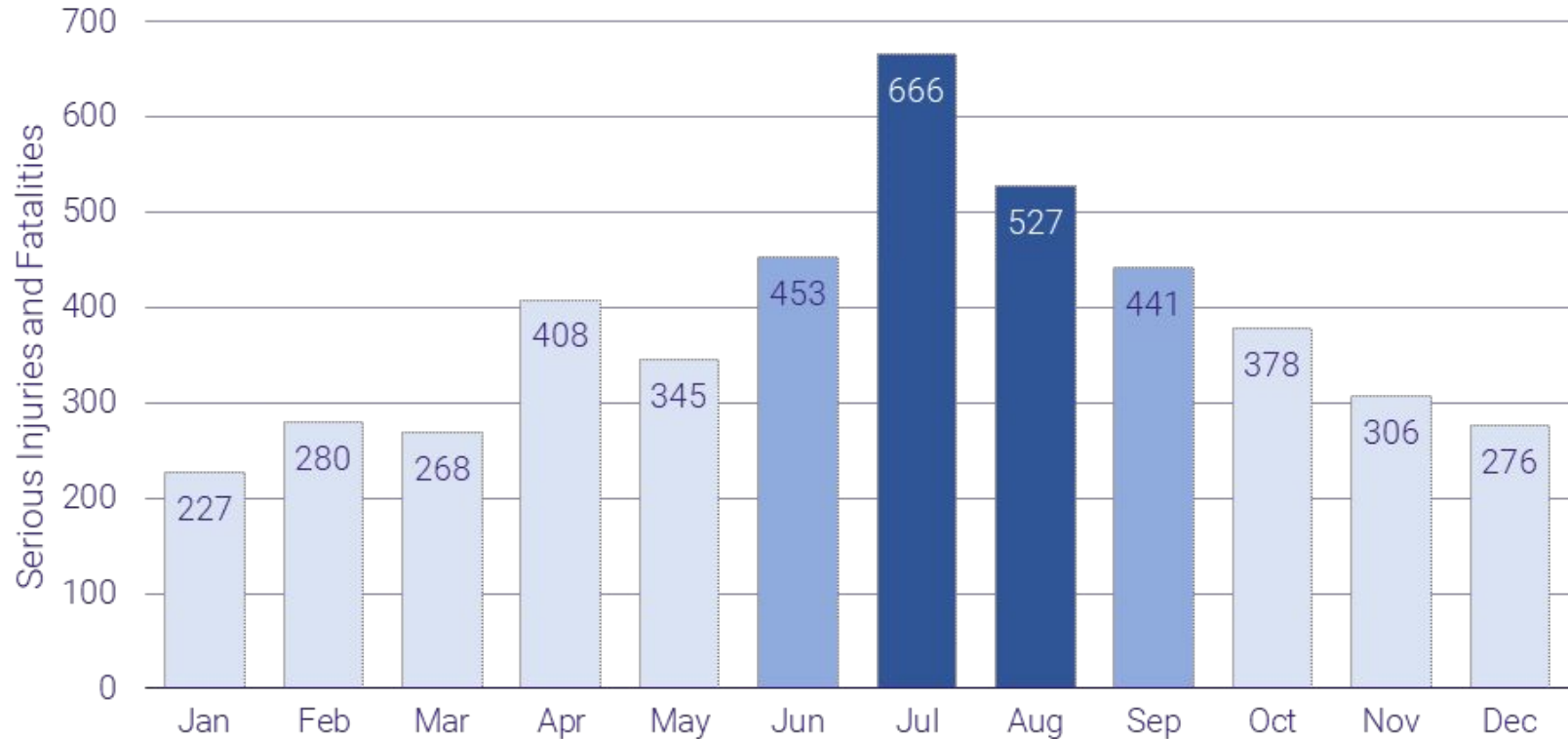


Implement a Safety Plan

Weekends Are More Accident Prone



Summers Are As Well



Conclusion

Conclusions

- Buy planes with **two or more jet engines**
- Buy planes from **Airbus or Embraer** for commercial and **Dassault or Gulfstream** for business
- Tailor your staffing, training and safety plan to account for **more dangerous weekends and summer months**

Future Lines of Inquiry

- Most accidents occur in good weather. Why?
- Accidents that do occur in bad weather are deadlier. Why?
- Could Natural Language Processing extract more useful information from the reports?

Questions?



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