MTP, Inc.

Move! That! Plane!

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Background

- MTP specializes in aircraft logistics: distribution, storage, and transportation of materials
- MTP is looking to establish warehouses around the US to store aircraft and parts for replacement, and reduce transportation resources from manufacturing sites to these warehouses

Approach to Business Efficiency

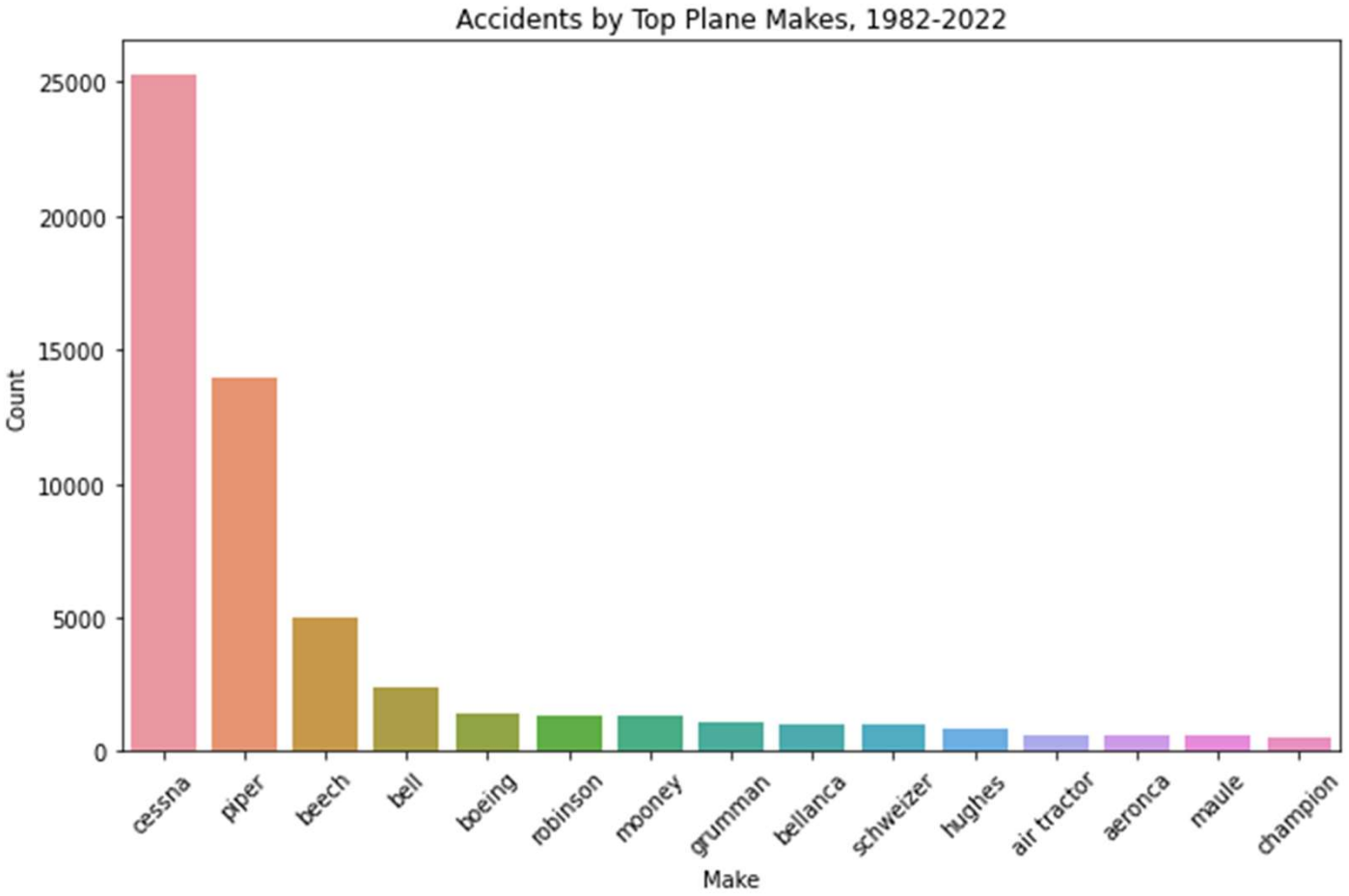
Objectives

- Optimize aircraft distribution to areas with high proportion of accidents, as hubs will require replacement aircraft
- Create relationships with companies to optimize distribution channels by selecting the highest make and model for replacement
- Determine best time of year for distribution
- Confirm all products are increasing safety measures over time (determined by crashes per year)

Approach

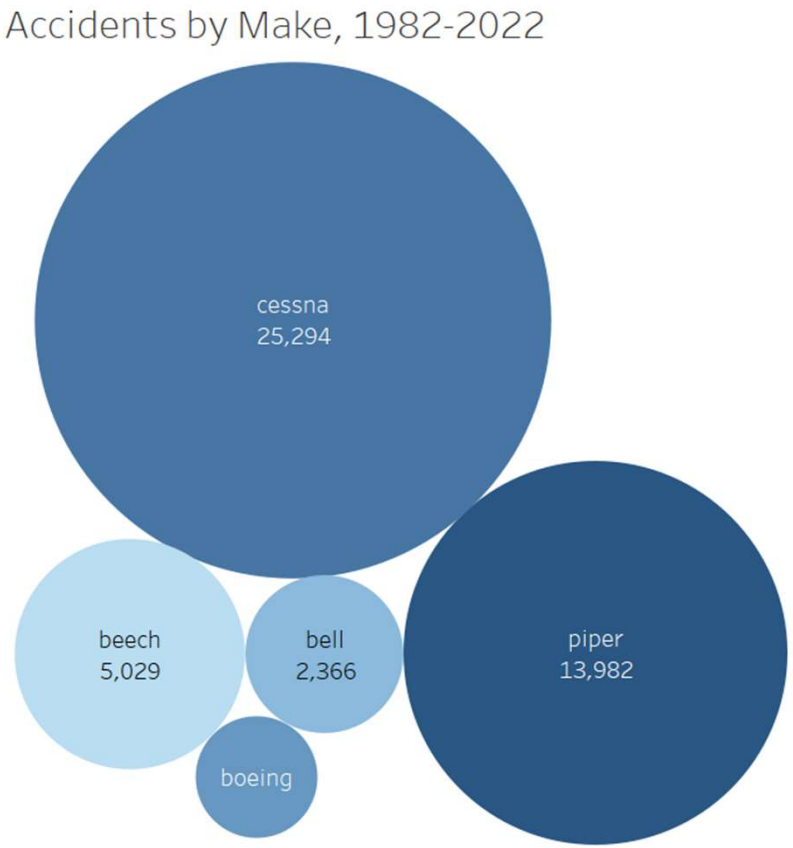
- Reviewed database of 82K aviation accidents in the United States between 1982-2022
- Assumed total replacement of these aircraft to satisfy FAA regulations

Products in focus:



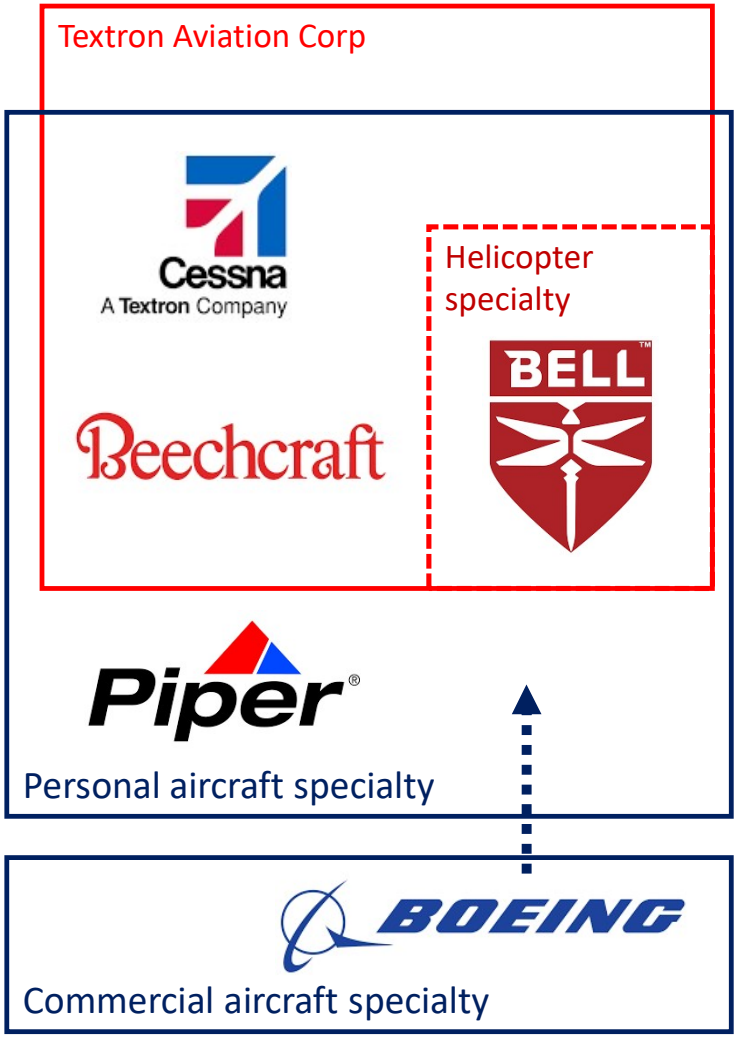
After the top 5 makes, amount of accidents by Make becomes relatively uniform; it is in the company's best interest to direct the customer's focus to our top 5 makes inventory

Focusing on Top 5 Makes:

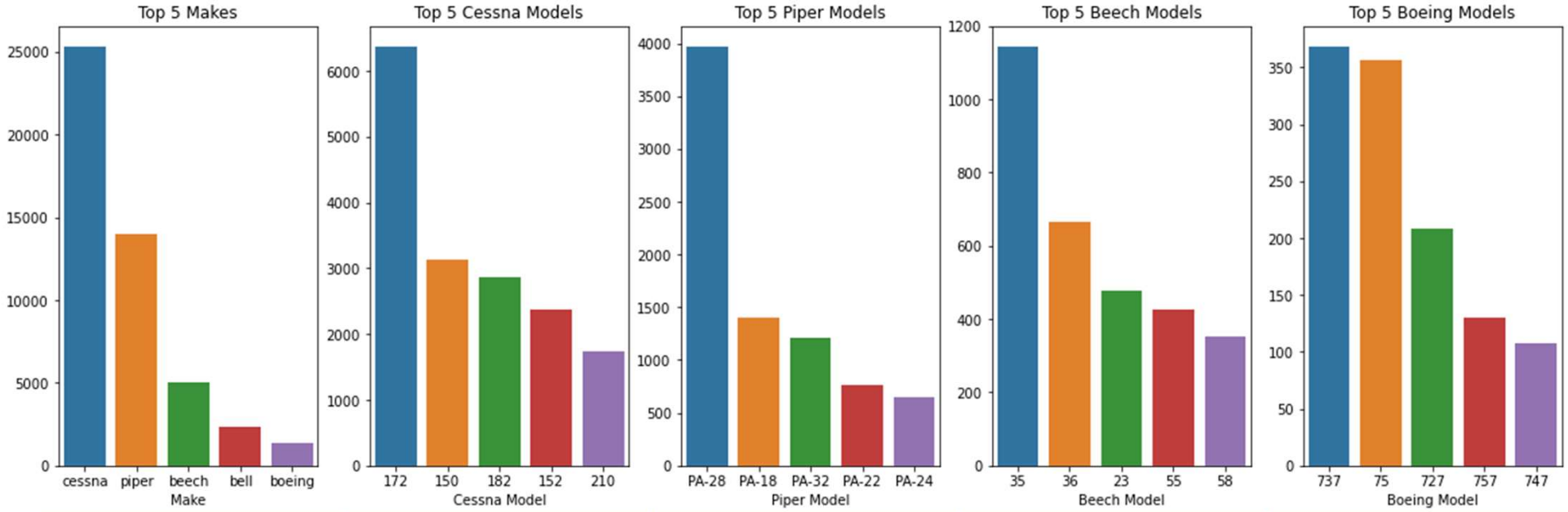


Areas of Focus:

- Personal/Private airplanes
  - Textron aircraft (Cessna, Beechcraft)
  - Piper aircraft
  - Boeing (To be discussed)
- Helicopters
  - Bell aircraft
- Commercial airplanes
  - Boeing

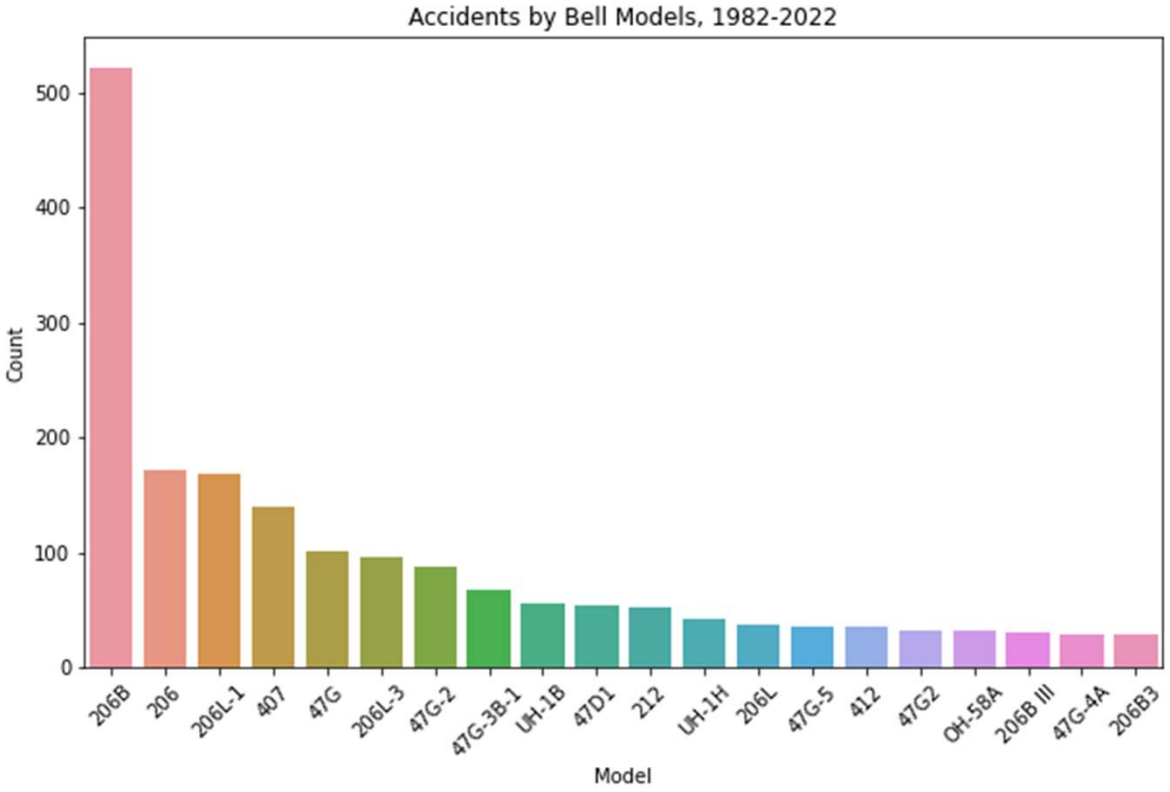


Models by Make in Accident Database:



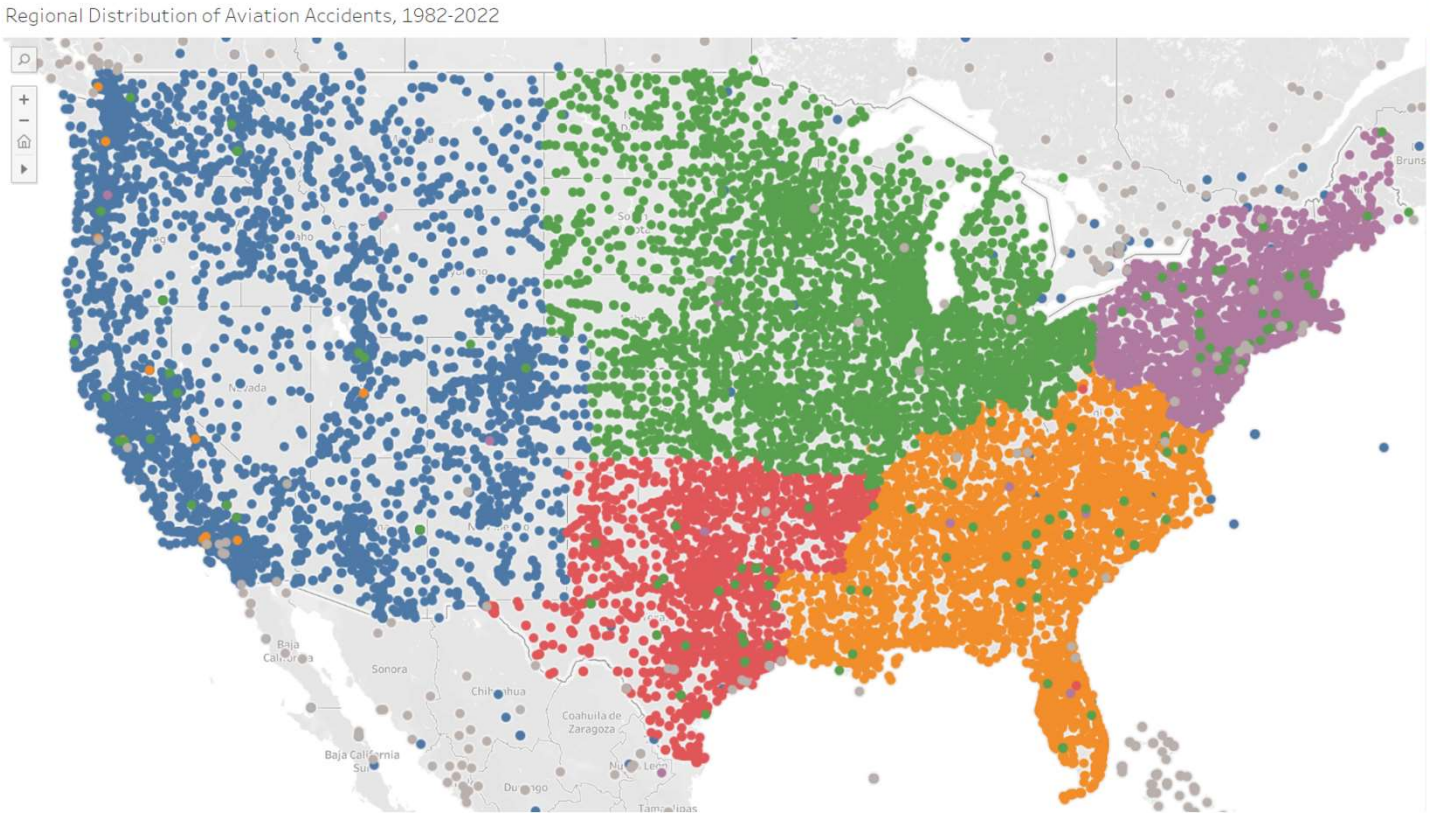
Key Findings - Total	Key Findings - Cessna	Key Findings - Piper	Key Findings - Beech	Key Findings - Boeing
Small airplanes a majority of aviation accidents	Top models are smaller / non-commercial aircraft	Main focus on PA-28 aircraft	Focus on the model 35 aircraft	Top models are largely commercial aircraft
Cessna majority of small aircraft accidents	Main focus on replacing model 172 aircraft	Models are built for interchangeable parts – to be discussed		Distribution of 737 will be to commercial airlines vs. private owners
Helicopter replacement grouped – to be discussed				Model 75 geared toward private aviation – main focus for MTP's Boeing division

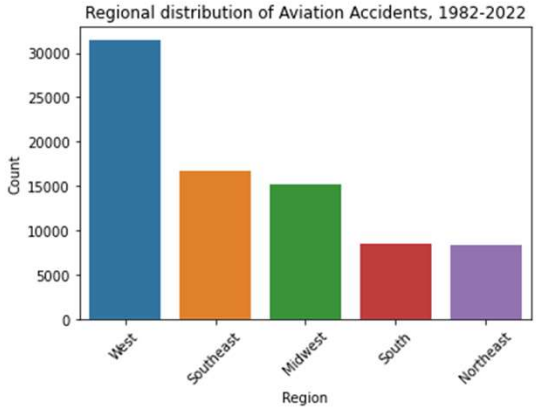
The Bell Exception:



- Helicopters are often highly-customized, and the numerical modeling system is not congruent with the airplane numerical modeling system
  - For example, the 206B model is separate from the 206 model, so we cannot group
- Less focus on specific models within Bell, locate single manufacturing source for all helicopters

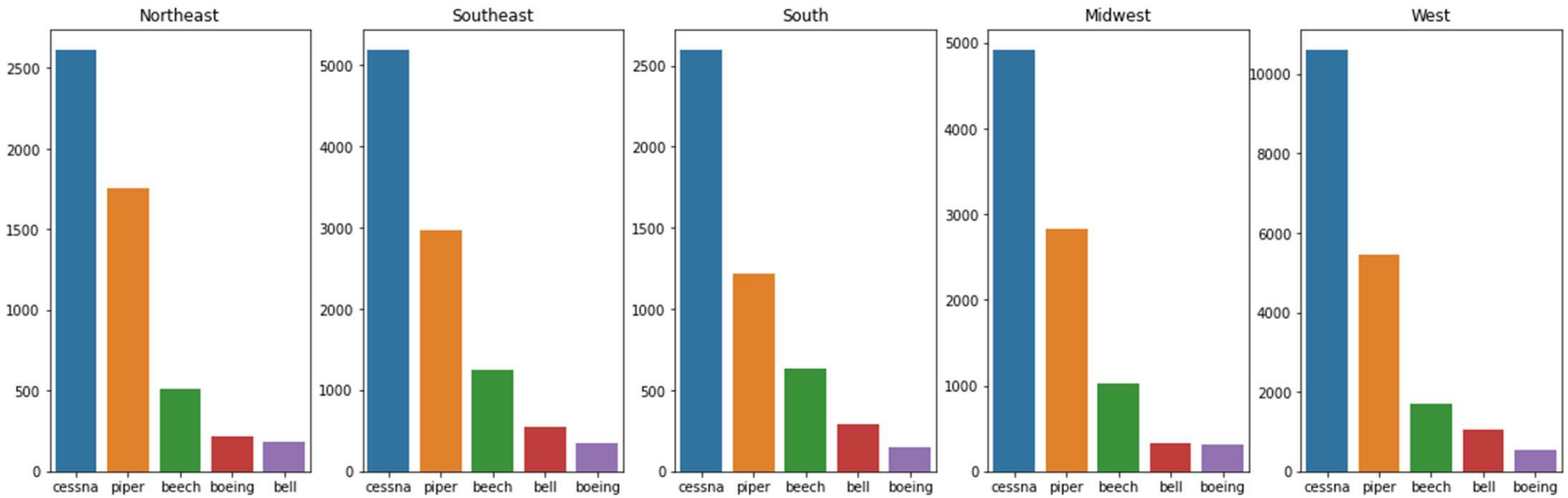
Geographical Spread





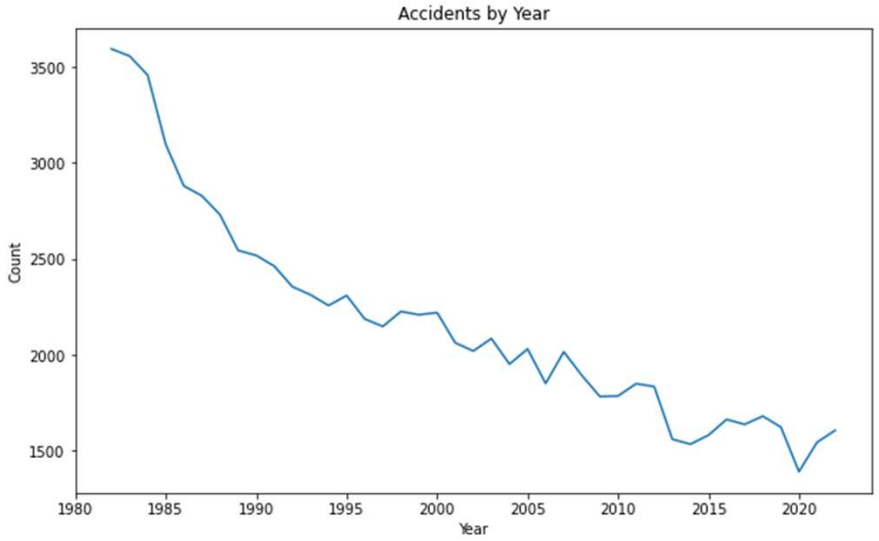
The West region holds the majority of all aviation accidents, and while holding the highest business opportunity, requires significant resources to distribute as the largest region by area (to be discussed)

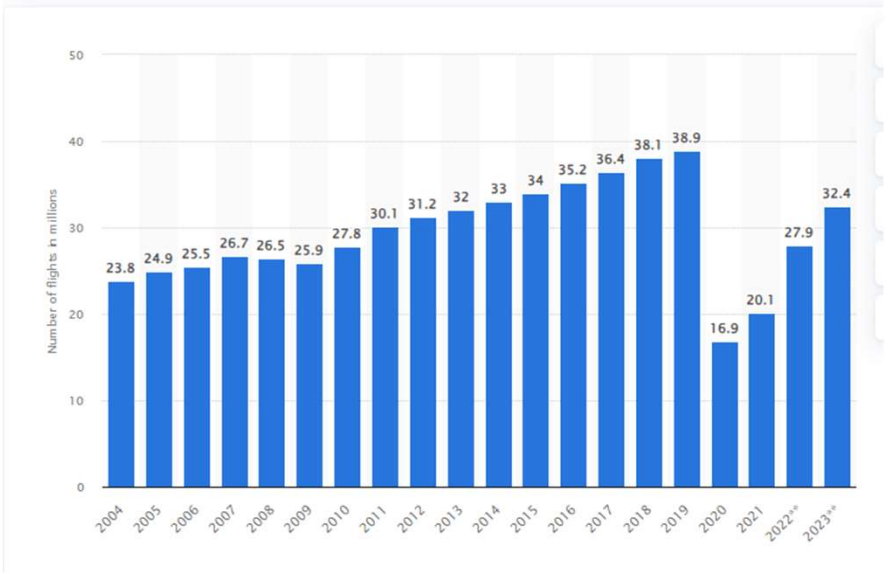
Regions of focus:



Across all regions, Cessna continues to be the front-runner for choice in aircraft; continue focus on replacement aircraft & parts within each region

Good for Society, Bad for Business

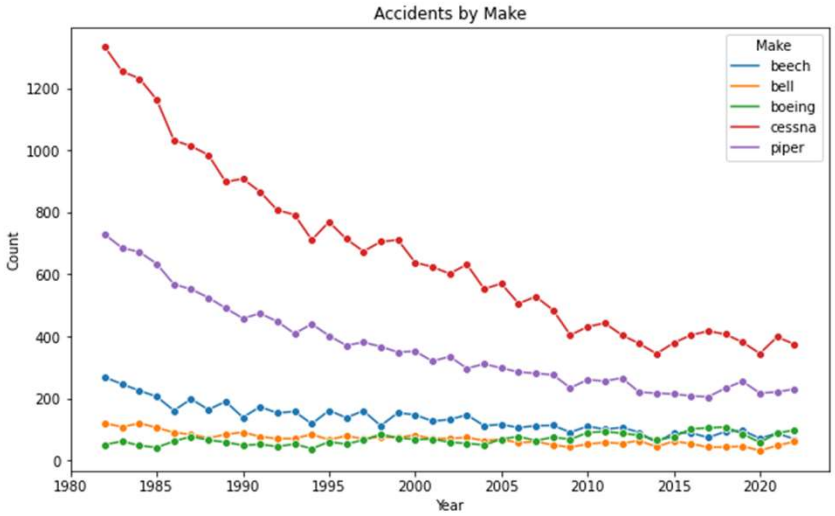




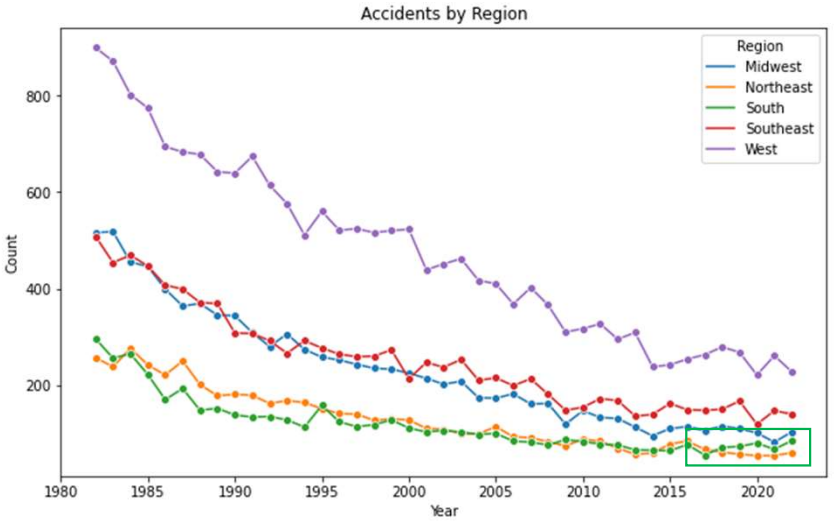
Source: Statista.com

Aviation accidents steadily declining over a 40-year span, despite a continuously increasing number of flights over the same period (1)

Decrease in Opportunities Uniform Across Sectors



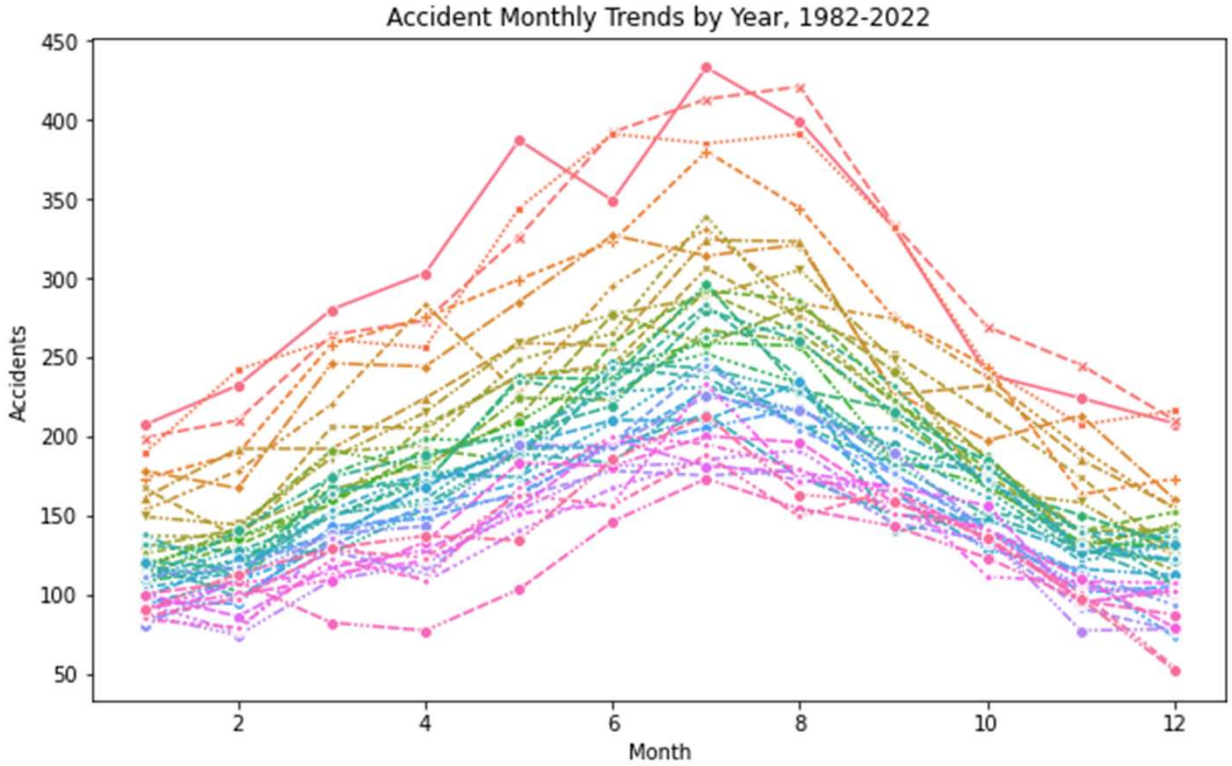
Key Findings
Cessna aircraft continuously the top attributor, main focus across all regions
Relatively stable number of crashes over time for commercial aircraft (Boeing) and helicopters (Bell) – reliable forecast of replacement aircraft



Key Findings
Accidents by all Regions decreasing over 40-year period
South Region noticing a slight increase in aviation accidents over latest 6-year timeframe (highlighted above); opportunity to investigate forecasts for future opportunities

Focusing on Seasonality

- On any given year in scope, accidents increase beginning in May, peaking in July, and decreasing through the end of the year
- To alleviate wait times between aircraft replacement, units and parts will be distributed in Q1-Q2 of the year



Results - Proposal

- Focus on Cessna aircraft distribution, as it is consistently the most common aircraft found in aviation accidents
- Within each of the top 5 makes, focus on the major models for distribution
- Distribution is cyclical within any given year: expect an increase in flights during warmer months (May – Aug with a peak in July), therefore aircraft & parts should be distributed before May of that year

Next steps

- Re-group geographical data (“Regions”) based off clustering methodology to minimize transportation distance, as larger regions (i.e. West) may have opportunities to consolidate resources for distributing
- Calculate average distance from airport to crash site
  - Assess safe travel distance perimeter by aircraft model for insurance coverage efficiency
  - Determine resources needed to retrieve damaged aircraft material
- Review accident damage measures to determine possibility of partial-repairs of existing aircraft, minimizing necessity of full-aircraft distribution

Thank you