AVIATION ACCIDENT ANALYSIS

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BUSINESS UNDERSTANDING

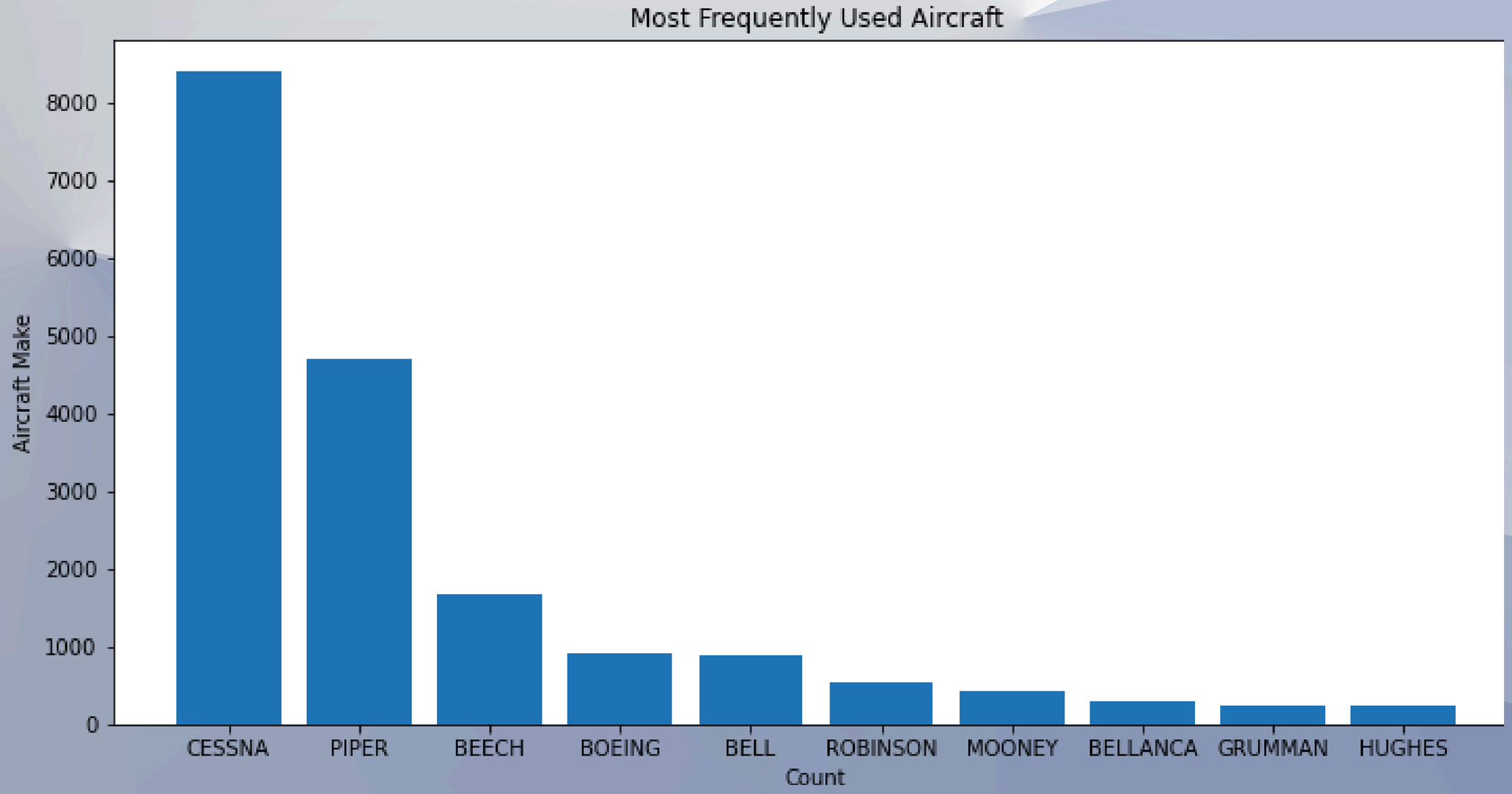
BUSINESS PROBLEM

The company is expanding into the aviation industry and needs to identify the safest aircraft models to minimize risks.

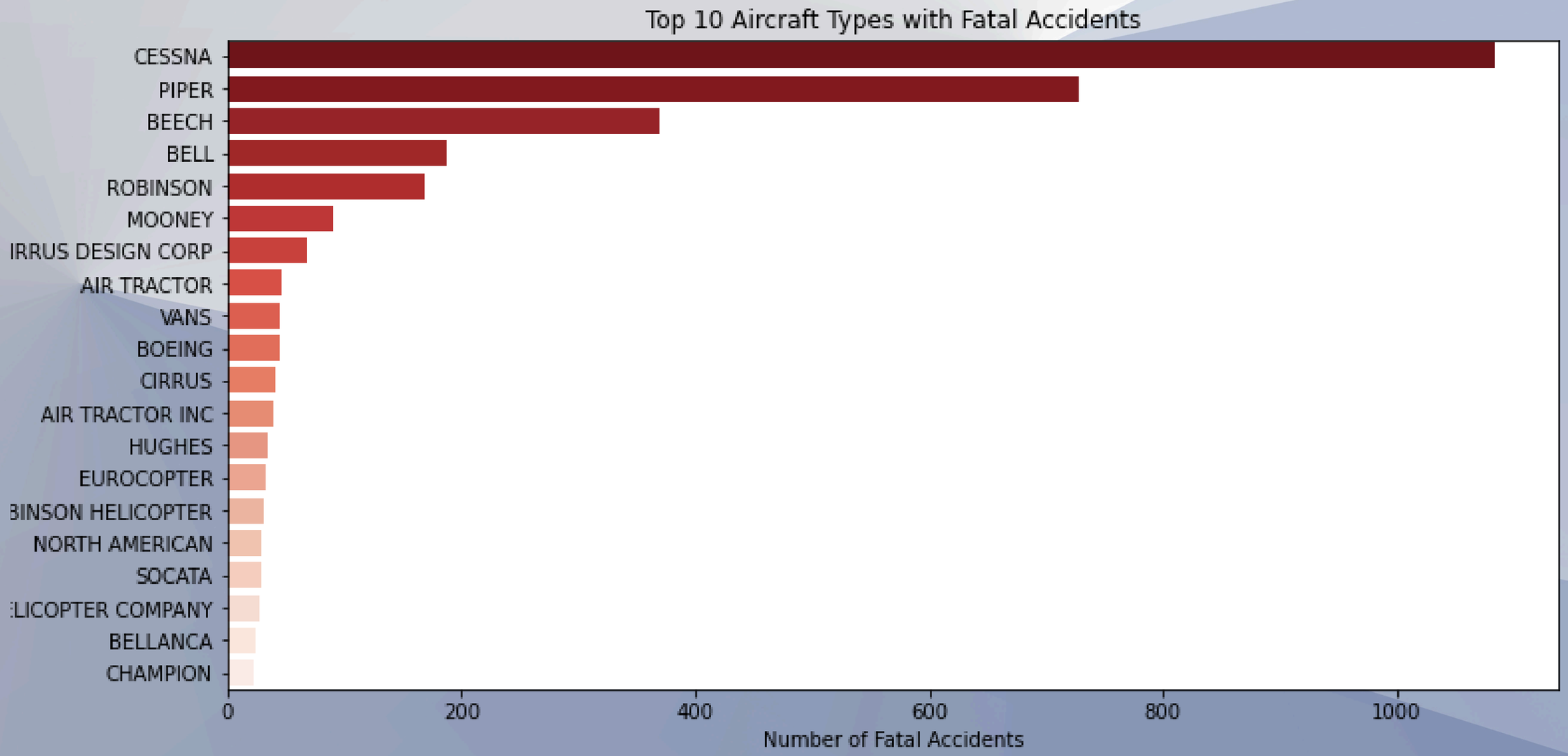
OBJECTIVE

Analyze aviation accident data to determine the safest Aircraft makes and provide data-driven recommendations.

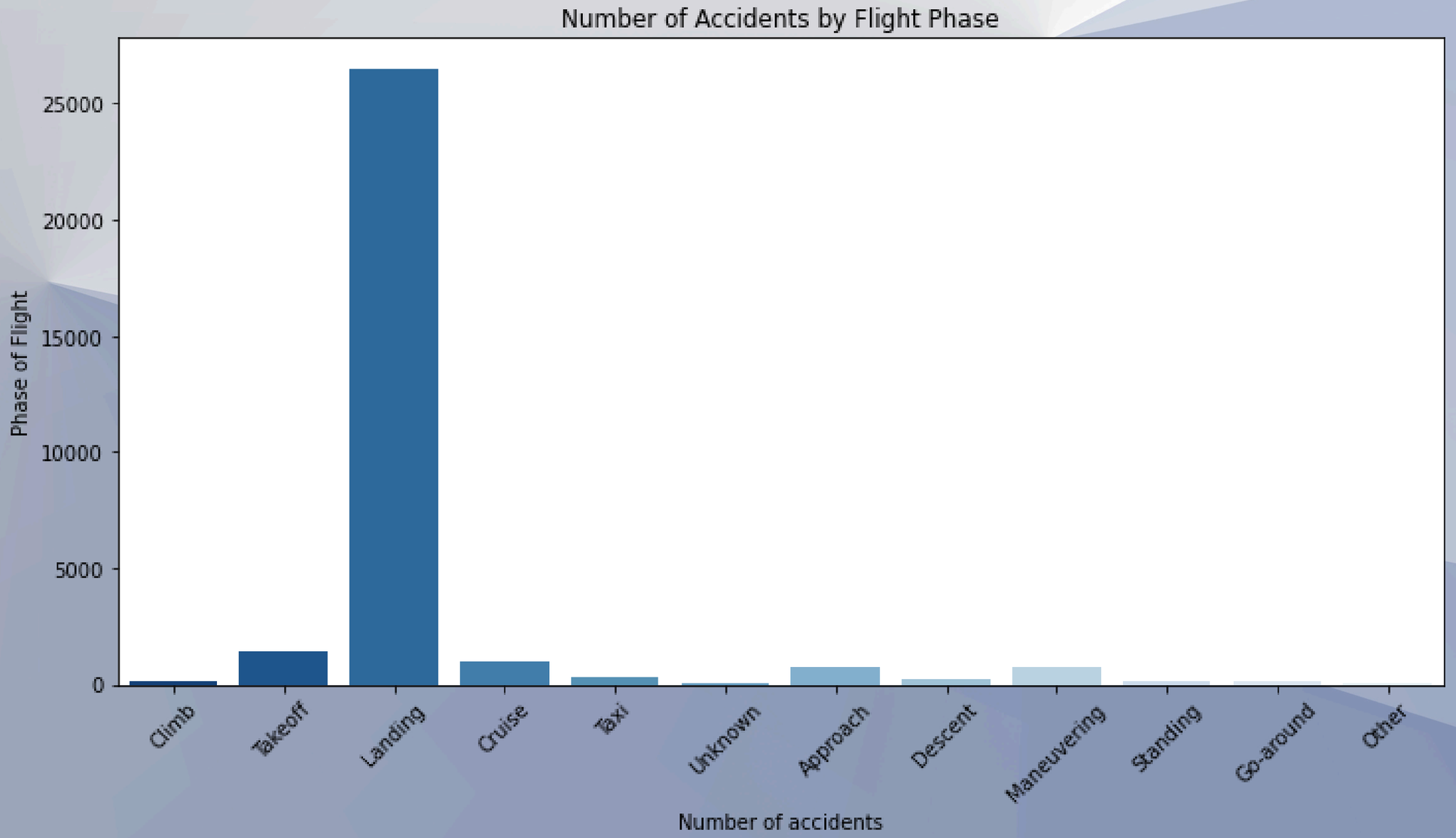
RESEARCH QUESTION 1 : WHICH IS THE MOST PREFERRED AIRCRAFT MAKE



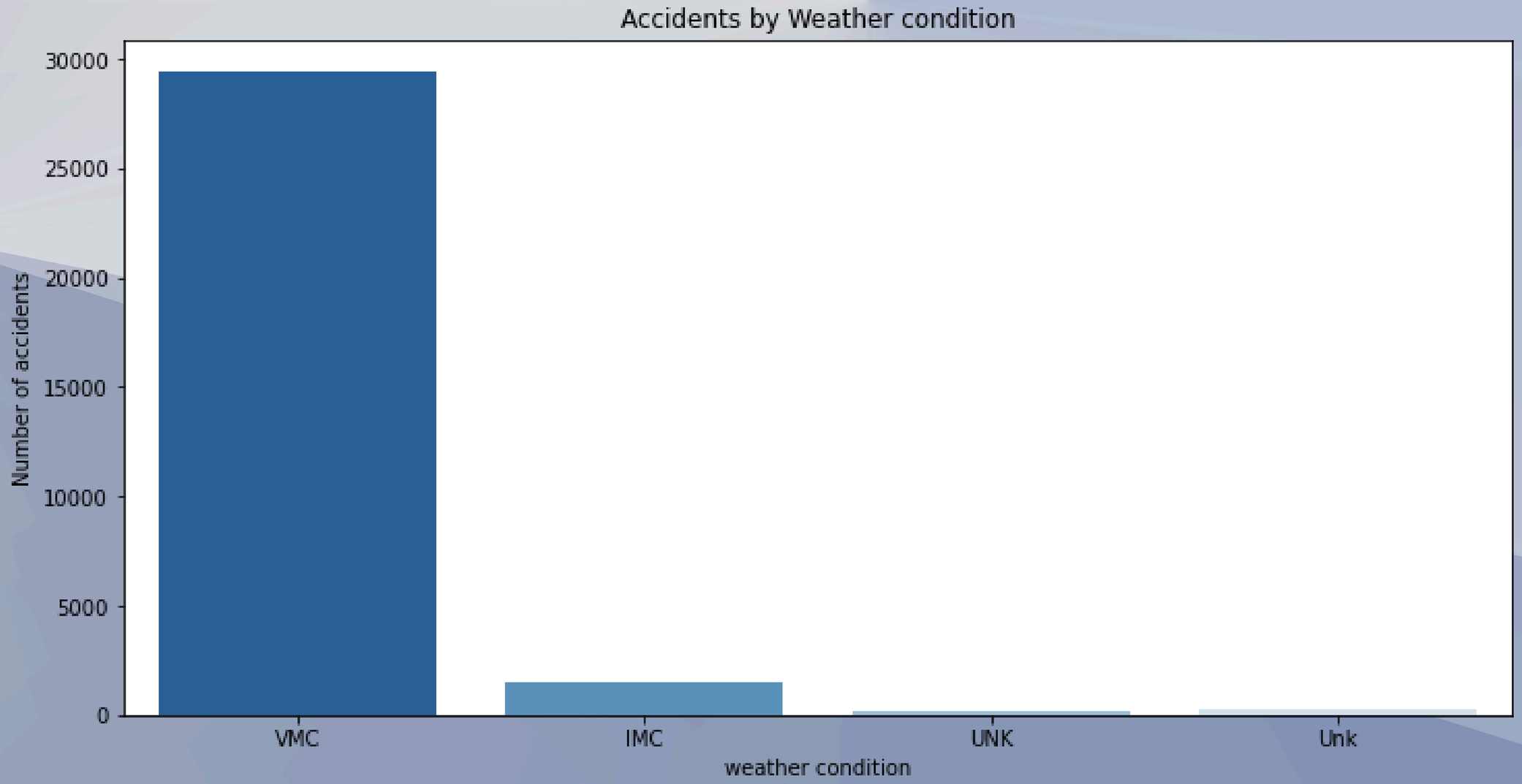
RESEARCH QUESTION 2 : WHICH AIRCRAFTS HAVE THE HIGHEST AND LOWEST FATAL ACCIDENTS



RESEARCH QUESTION 3: WHICH FLIGHT PHASE HAS THE HIGHEST ACCIDENT RISK



RESEARCH QUESTION 4 : DOES WEATHER INFLUENCE AVIATION



RECOMMENDATIONS

- Invest in makes like Bell, Grumman and Mooney that are popular but still maintain relatively low accident rates .
- Improve pilot training and maintenance checks to reduce risks during landing and takeoff.
- Invest in technology that will assist pilots to navigate all weather conditions .

CONCLUSION

- Cessna and Piper have the highest number of accidents. However, this does not necessarily mean they are the most dangerous, higher usage eventually leads to more recorded incidents.
- Bell, Grumman, and Mooney have lower accident numbers which suggest they are lower operational risk. These makes should be considered for purchase.
- Accidents are more frequent in VMC suggesting that clear weather conditions do not guarantee safety. This may be assumed its because the pilots have to rely solely on the skills to navigate the plane.

THANK YOU!