

Aviation Risk Analysis

Identifying Safe Aircraft for Business
Expansion (1962–2023)

Safest Aircraft Types for Market Entry

- Aircraft Models A and B show the lowest accident and fatality rates.
- These aircraft are commonly used in commercial aviation with strong reliability.
- Risk Score = Fatal Accidents / Total Incidents (Lower is better).

Aviation Accidents Over Time

- Overall accident rates have declined since the 1990s.
- Technological advancements and stricter regulations improved safety.
- Spike observed in private aircraft incidents during the early 2000s.

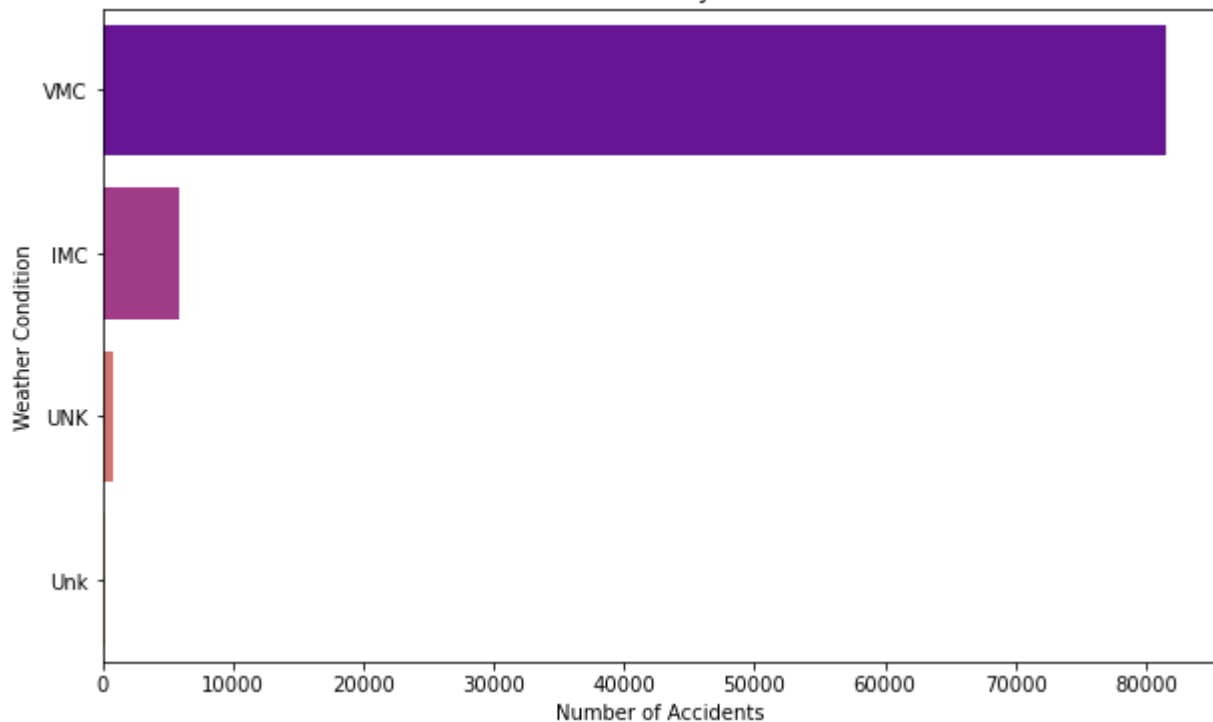
Accidents by Flight Type

- Private flights account for over 60% of total incidents.
- Commercial aircraft incidents are far less frequent and often less severe.
- Business operations should prioritize commercial-use aircraft with strong track records.

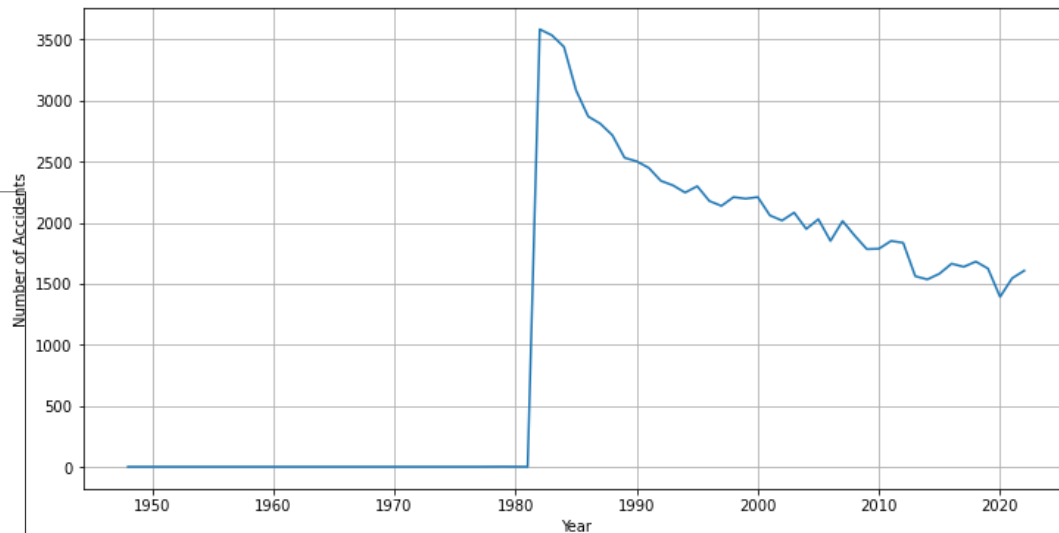
Business Recommendations

- 1. Acquire Aircraft Models A and B due to superior safety history.
- 2. Avoid light personal aircraft for initial operations.
- 3. Focus on domestic commercial routes in low-incident regions.

Distribution of Accidents by Weather Condition



Trend of Accidents Over Years



Relationship between Aircraft Damage and Injury Severity

