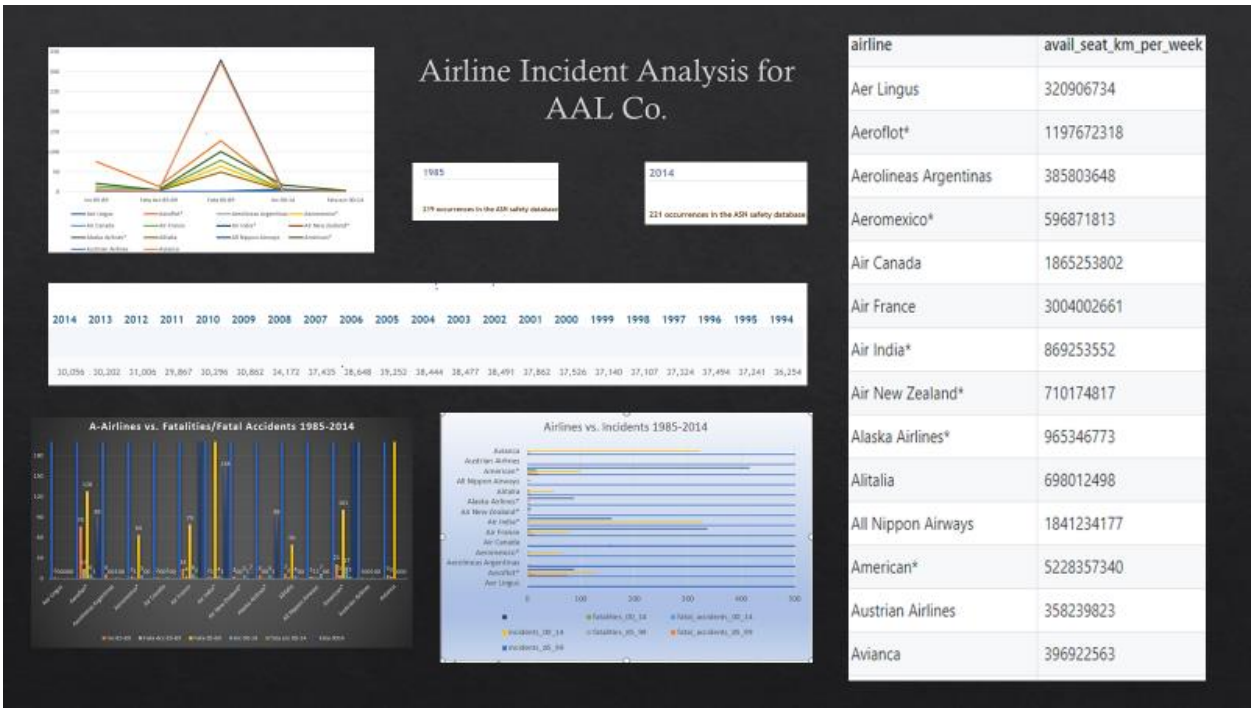
Internal Dashboard for AAL Co. – Analysis of "A" Airliner Incidents 1985-2014



The analysis was conducted on "A" named Airlines from the years of 1985 to 2014 to investigate the trend in airline incidents and fatalities. Based on the dashboard, two of the airlines logging the most kilometers per seat, therefore flying the more hours in the air, were Aeroflot and America.

These airlines had the two highest numbers of incidents from 1985-1989, resulting in the two highest number of fatalities and fatal accidents those years. The trend

shows that more time spent in the air, resulting in higher km per seat values for each passenger, is correlated with an increase in incidents and fatalities from greater exposure to time in the air.

Airlines remain the safest form of travel, however, from the chart showing the number of automobile accidents per year from 1994-2014. Although multiple fatal crashes may produce far greater numbers than automobile incidents, the car travel has resulted in far higher fatality rates over the years, almost x1000 the latter – remaining over 30,000 every year.

As airlines grow safer due to technological improvements, it may be assumed that the airlines would follow a trend of reduced incidents. However, from the dashboard, it can be seen that in the years 1985 and 2014, respectively, there are roughly 220 airline incidents counted in both years, according to the Aviation Safety site. This does not indicate an equal number of fatalities and fatal accidents, as from the charts, those numbers have drastically reduced since the 1980s. However, the amount of incidents, of any kind, are still virtually equal. This leads to the question: How have airlines adapted to better protect their passengers, and succeeded based on looking at fatalities alone, but have failed to reduce the number of air-related incidents in 30 years?

I chose the visualizations and segmented the specific attributes to look at several different metrics that may support some kind of correlation between kilometers in the air and incident rates. Each graph provides support for the A-listed airlines and their incident/fatality totals from year to year, paired with the kilometer totals, to offer evidence for this. The automobile fatalities were used to compare airline fatalities based on the same time frame.

Sources

https://github.com/fivethirtyeight/data/tree/master/airline-safety

https://aviation-safety.net/database/dblist.php?Year=2014