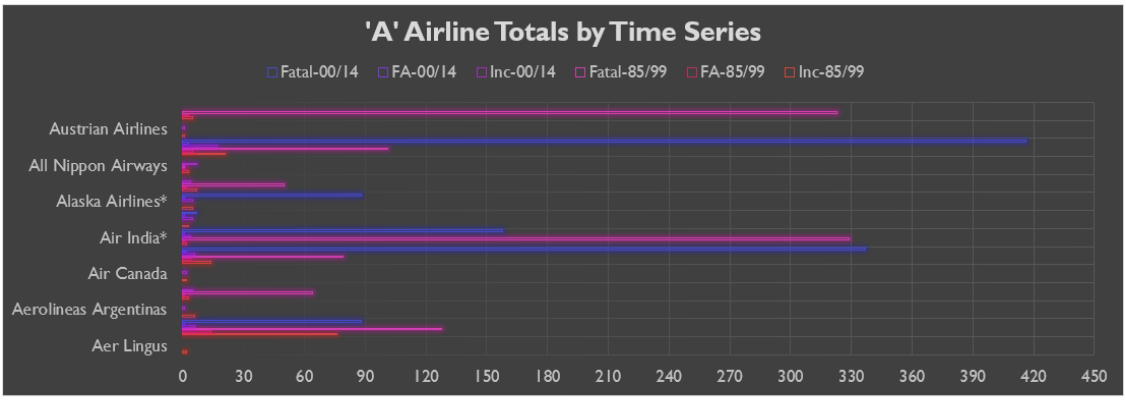
A-Airline Executive Summary

Initial 'A' Airline Numbers

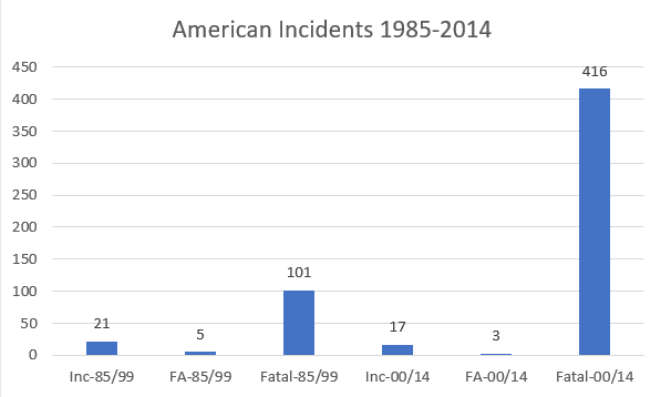
Airline	AvailSeat	Inc-85/99	FA-85/99	Fatal-85/99	Inc-00/14	FA-00/14	Fatal-00/14
Aer Lingus	320906734	2	0	0	0	0	0
Aeroflot*	1197672318	76	14	128	6	1	88
Aerolineas Arg	385803648	6	0	0	1	0	0
Aeromexico*	596871813	3	1	64	5	0	0
Air Canada	1865253802	2	0	0	2	0	0
Air France	3004002661	14	4	79	6	2	337
Air India*	869253552	2	1	329	4	1	158
Air New Zealar	710174817	3	0	0	5	1	7
Alaska Airlines	965346773	5	0	0	5	1	88
Alitalia	698012498	7	2	50	4	0	0
All Nippon Air	1841234177	3	1	1	7	0	0
American*	5228357340	21	5	101	17	3	416
Austrian Airlin	358239823	1	0	0	1	0	0
Avianca	396922563	5	3	323	0	0	0

Graphed 'A' Airline Year Totals

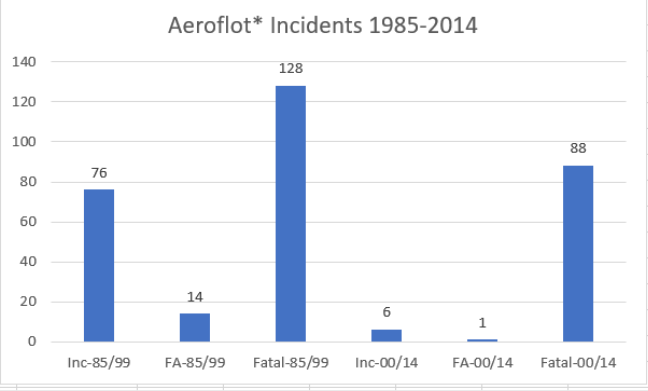


Airline Fatalities of the Last 100 Years

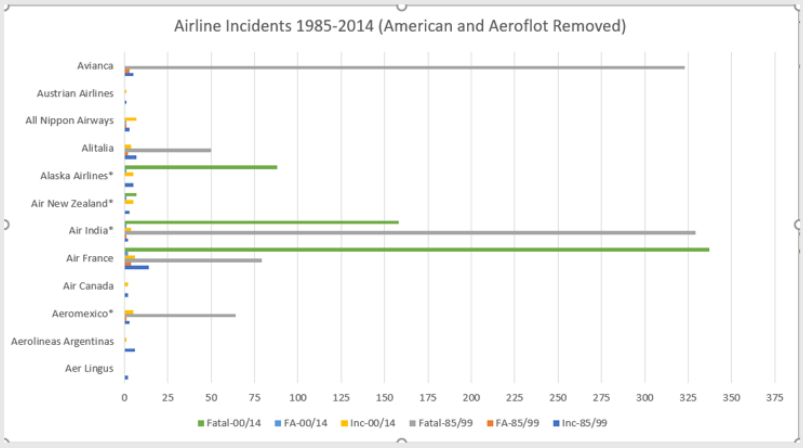
American Airlines Incidents/Fatalities 1985 to 2014



Aeroflot Airline Incidents/Fatalities 1985 to 2014



Airline Incidents with American and Aeroflot Removed



This executive summary analyzed the incidents and fatalities of AAL Airlines from 1985 to 2014. The visualizations were chosen to identify any outliers in the airlines, and conduct further analyses as needed to determine an approach for addressing the situation. The first graphic shows the initial totals for incidents, fatal accidents, and fatalities for the airlines for 1985-1999, and then again from 2000-2014. The next graphic displays the totals in a bar chart time series, to be able to visualize any outliers in the data. From this, we can see that Aeroflot and American Airlines had the highest number of incidents between 85-99, including fatalities and fatal accidents. The trend appears to be correlated to kilometers per seat, resulting in more hours in the air, which these airlines also led all other airlines during this time frame. When breaking down these two airlines in the next graphs, both had a large amount of overall fatalities in recent years (2000-2014). If we look at the historical data for the last 100 years, we can see that there is a downward trend in airline fatalities after reaching a peak in the 1970's (excluding the 1940's outliers). These numbers indicate that AAL has been successful in protecting its passengers and

initiating safety measures with updated technology, but the incidents the most recent timeframe have resulted in a large amount of fatalities. Based on these findings, the recommendation for analyses should be centered on the *type* of incidents, and not necessarily the overall numbers. Prevention can only be done to an extent with the safety of passengers, but if mechanical devices are not up to par in the first place, this should be addressed appropriately. Conducting analysis on the types of incidents will support the findings on incidents and fatal accidents, while giving more information to investigate how AAL Airlines can continue to promote safety by exploring all instances associated with airline crashes and deaths.

Sources

https://github.com/fivethirtyeight/data/blob/master/airline-safety/airline-safety.csv#L1

http://www.baaa-acro.com/statistics/death-rate-per-year