Learning outcomes covered by the Assignment; 2 & 3

1. Critically analyse safety data from incident reporting systems using appropriate statistical techniques and models and draw inferences.
2. Assess evidence from an air accident investigation and evaluate the appropriateness of safety recommendations.

Your assignment is an opportunity for you to practice the Accident & Incident analysis tools/skills we have been working on all week. Please answer the Five Questions concerning the Accidents we studied in class. Remember the majority of the Investigation is on analysis, not decisions/recommendations, therefore the possible marks for this assignment reflect **your ability to analyse not decide**. Make sure you consider multiple points, positions and possibilities for each circumstance; investigations often take years of deep analysis in order to justify a conclusion.

Assignment Weighting

* Question 1, 20%
* Question 2, 15%
* Question 3, 20%
* Question 4, 25%
* Question 5, 20%

**Question 1/ Space Shuttle Columbia Report**

It has been argued by many experts that the “culture” at NASA was to blame for the accident.

* Critically analyse the culture at the time of the accident (10 marks)
* One of the investigators was quoted as saying “Challenger all over Again” analyse the information available via reporting systems that could have prevented this accident (10 Marks)

 **Question 2/ British Airways Flight 268**

Assume you are tasked with an investigation of Flight 268;

* Analyse the crew’s decisions from the time of the fire to the eventual landing (10 Marks)
* Based on the discussion in class do you think the Captain should have been charged by the FAA, explain? (5 Marks)

**Question 3/ Valujet 592**

Assume you are part of a multi-disciplinary investigation team, the IIC (Investigator in Charge) has asked you to analyse the rapid growth of Valujet as it may have played a role in the accident;

* From the Data available do a high level analysis of Valujet’s growth, and how rapid growth affects safety in general (do not make any recommendations/decisions only analyse the growth) for the IIC to decide if this is an area worth exploring (15 marks)
* Assume there is pressure from the highest office to not explore growth any further. Based on your analysis the IIC asks you if you’re ok dropping this and moving onto another part of the investigation. How would you respond to that? (5 Marks)

**Question 4/ Alaska Airlines 261**

* Analyse the CVR data and the crews actions (10 Marks)
* Analyse the FAA’s oversight of Alaska Airlines (5 Marks)
* Why would the NTSB allow the board member statements to be included towards the end of the report? (5 Marks)
* What recommendation would you make to the FAA (5 Marks)

**Question 5/ Japan Airlines Boeing 787-8 JA829J**

* Critically analyze the role of the manufacturing process for the 787? (15 Marks)
* What recommendation would you make to the FAA, explain? (5 Marks)