Task. Get familiar with the following questions. Next, use the link given below and watch the video. Take some notes and get ready to answer as many questions as possible.

## British Airways Flight 38 (2008) - The Heathrow Enigma

- 1. What problem did the pilots have on descent at Heathrow Airport?
- 2. Was the main cause of the crash clear to the investigators right after the crash?
- 3. How long was the flight and what was the route of the flight?
- 4. What type of aircraft was involved in the crash landing?
- 5. What was the flight destination airport?
- 6. Was the autopilot set when the aircraft lined up for RWY 27L or was it flown manually by the pilots?
- 7. How strong were the gusts of wind on descent?
- 8. Why can the autopilot help in turbulent weather?
- 9. How soon before the crash landing did the pilot take over to fly the plane?
- 10. Who had control of the aircraft on landing? The captain or the first officer?
- 11. Was the undercarriage up or down on landing?
- 12. What was the British Airways Flight 38 call sign?
- 13. Did passengers feel anything wrong on the approach to land?
- 14. What was the direct indication of the engines failure?
- 15. What impact point was the captain afraid of hitting on landing which might have led to 100% fatality rate?
- 16. Why did the captain decide to retract the flaps?
- 17. Why was this action risky at the same time?
- 18. What did the pilot do first? Retracted the flaps or called Mayday?
- 19. What's the checklist procedure after a crash landing?
- 20. What was the imminent (possible) danger for passengers after the crash landing?
- 21. How many passengers got injuries due to this crash landing?
- 22. What early hunches and clues did the investigators have at an early stage of the investigation? Give at least 3 of them.
- 23. What's the British counterpart of American NTSB?
- 24. How far from the runway did the aircraft hit?
- 25. What is a QAR and where is it located? What is it mainly used for?
- 26. What was the big surprise when the tin kickers got access to the QAR?
- 27. Why was there so much pressure on the investigators?
- 28. What kinds of fuel contamination are mentioned?
- 29. How far did the inspectors go to trace the fuel origin and what did they find out?

- 30. What did inspectors find in the tanks of the aircraft?
- 31. Why was the case of Malaysia Airlines from 3 years back similar to the one at Heathrow?
- 32. What was the time window between when the pilots were fully aware what was going on and the accident was inevitable?
- 33. What was the descent rate after the double engine failure on Flight 38?
- 34. How much did the captain reduce the flap setting prior to landing?
- 35. Does the QAR record the real-time data? Why yes / why not?
- 36. What is fuel waxing?
- 37. How often did the captain check the temp gauges during the flight?
- 38. What was the weather on the day of the accident?
- 39. What was the fuel temperature at different legs of the flight?
- 40. What was the breakthrough in the investigation no matter how unlikely it seemed to be?
- 41. How did engineers deal with the problem of ice forming in the fuel lines on jet airliners a long time ago?
- 42. How does FOHE work?
- 43. What 3 things did the investigators have to prove speaking of FOHE?
- 44. What did they find out?
- 45. What was the breakthrough and the answer to the puzzle?
- 46. What happened to Delta 777 flight (on the route from Shanghai to Atlanta) 10 months after the crash at Heathrow that helped the investigators?
- 47. What caused the clogging of the fuel/oil heat exchanger?
- 48. How did the engineers redesign the FOHE after the discovery of the true cause of the crash?

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