

1. Watch the video under the following link and answer the questions below.

https://www.youtube.com/watch?v=x_yHtfGH0nl

British Airways Boeing 747-400 in D-Check

1. How many parts does a complete overhaul of the B747 involve?
2. What is usually considered to be the heart of the aircraft?
3. What are the 3 basic flight instruments which are crucial to fly the airplane in the worst-case scenario?
4. How long does the complete check on Victor X-Ray take?
5. What's the total number of components of a B747?
6. What's the height of the tip of VX's tail fin?
7. How many wheels does its landing gear consist of?
8. What's a common rule applying to food and pilots flying the same flight?
9. How many escape chutes are there on a 747?
10. What's the time limit for the chutes to open?
11. What 2 types of fatigue can pressurizing the cabin cause?
12. What's the usual temperature at FL of 35,000 feet?
13. What method is used to detect cracks in the frame of the aircraft?
14. What's the VX's wingspan?
15. What's the total displacement of the wings up and down during the flight at cruising speed?
16. What's the Bernoulli's effect?
17. What is the main function of flaps?
18. What are static wicks and what are they used for?
19. What is another term for the nose cone and what is it used for?
20. How much thrust does a single engine on 747 generate?
21. How many bolts attach the engine to its pylon?
22. What engines are installed on VX?
23. What are the fan blades made of?
24. How do engineers know where each blade should be installed in the fan?
25. How much fuel does the main tank hold?
26. How many fuel tanks are there in all?
27. What's the fuel quantity for the whole aircraft?
28. How many separate jobs must be completed before the VX can be classified as airworthy again?
29. Which engine is engine number 4 on a 747?
30. What are the two ops the autopilot cannot conduct on approach?
31. What are the 2 flight recorders called and where are they housed?
32. What sort of temperature is a black box specified for?

2. **In the following text on *D-Check* some adjectives have been removed. Read the text and try to put them where they belong.**

further / involved / comprehensive / phased out / retired / tremendous / known / performed / metal / stored / demanding / average / expensive / entire / older / suitable / removed / scrapped

The D check, sometimes 1) _____ as a "heavy maintenance visit" (HNV) is by far the most 2) _____ and 3) _____ check for an airplane. This check occurs approximately every 6-10 years. It is a check that more or less takes the 4) _____ airplane apart for inspection and overhaul. Even the paint may need to be completely 5) _____ for 6) _____ inspection on the fuselage 7) _____ skin. Such a check can generally take up to 50,000 man-hours and 2 months to complete, depending on the aircraft and the number of technicians 8) _____. It also requires the most space of all maintenance checks, and as such must be 9) _____ at a 10) _____ maintenance base. The requirements and the 11) _____ effort involved in this maintenance check make it by far the most 12) _____, with total costs for a single D check in the million-dollar range.

Because of the nature and the cost of such a check, most airlines — especially those with a large fleet — have to plan D checks for their aircraft years in advance. Often, 13) _____ aircraft being 14) _____ of a particular airline's fleet are either 15) _____ or 16) _____ upon reaching their next D check, due to the high costs involved in comparison to the aircraft's value. On 17) _____, a commercial aircraft undergoes two or three D checks before being 18) _____.