EGR 120

Introduction to Engineering

File: N120MD1B

Media Assignment #1

View the first 20 minutes of the video listed above (the rest is on other Boeing projects) and complete the

Media Title: The 787 Dreamliner – Inside the World's Most Anticipated Airplane

Length: First 20 minutes of a 42:56 minute video

Online Access: Search for the video on YouTube or use the link below:

http://www.youtube.com/watch?v=Sw0POFsgzFk&noredirect=1

Assignment:

assignment below and submit it to the instructor by the assigned due date. Fill in the blank in each part below or answer the question.	
1.	Boeing designed over half of the 787 to use (what material?), which is 4 times stronger than aluminum and 40% lighter.
2.	The use of lighter materials will reduce the 787's fuel cost by an estimated%.
3.	To minimize financial risk, Boeing outsourced % of the production to companies in countries including Italy, Japan, Korea, France, and the United Kingdom.
4.	Large components, such as wings and sections of the fuselage, were transported to Boeing's
	plant for assembly using a modified 747 called the
5.	Boeing's chief rival in designing and building airplanes is
6.	The Boeing 787 has (how many?) engines.
7.	The first thing that many customers notice when flying in the 787 is that the are 65% larger.
8.	The Boeing 787 was tested with over 1000 test flights. It was also tested in temperatures
	ranging from to
9.	Airlines ordered 57 Boeing 787's at an estimated cost of \$8 billion.
10.	Boeing predicted that once one major airline started to use 787's, other airlines would rush to buy 787's? Write 1-2 paragraphs discussing why other companies would rush to buy 787's.
11.	Boeing took a risk in using other companies to build much of the plane. Write 1-2 paragraphs discussing why was this a risk?
12.	Some engineers like working on a huge project like the Boeing 787 with thousands of other engineers while

some engineers prefer to work for smaller companies with just a few engineers. Write 1-2 paragraphs

discussing the advantages of each type of job. Which type would you prefer?