Aerospace Engineering

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Education and Certification Required and Salary

- Most people need a bachelor's degree to enter in the field
- Entry level engineers are not required to be certified, but more experienced engineers must be licensed as professional engineers (PE)
- Median pay in 2010 was $97,480 a year and $46.86 an hour

Job Description

- Aerospace engineers design airplanes, spacecraft, satellites, and missiles
- They test prototypes to make sure they work as they were designed
- Aerospace engineers develop new technologies for aviation, defense systems, and spacecraft
- Career Profile of an Aerospace Engineer
- Average day of Aerospace Engineer

Field of Aerospace Engineering

- In 2010, there were 81,000 aerospace engineering jobs in the United States
- The 5% growth rate is slower than other fields of work
- Some jobs require national security level clearance which will help keep jobs in the country
- Demand for more fuel efficient aircraft will provide a need for aerospace engineers

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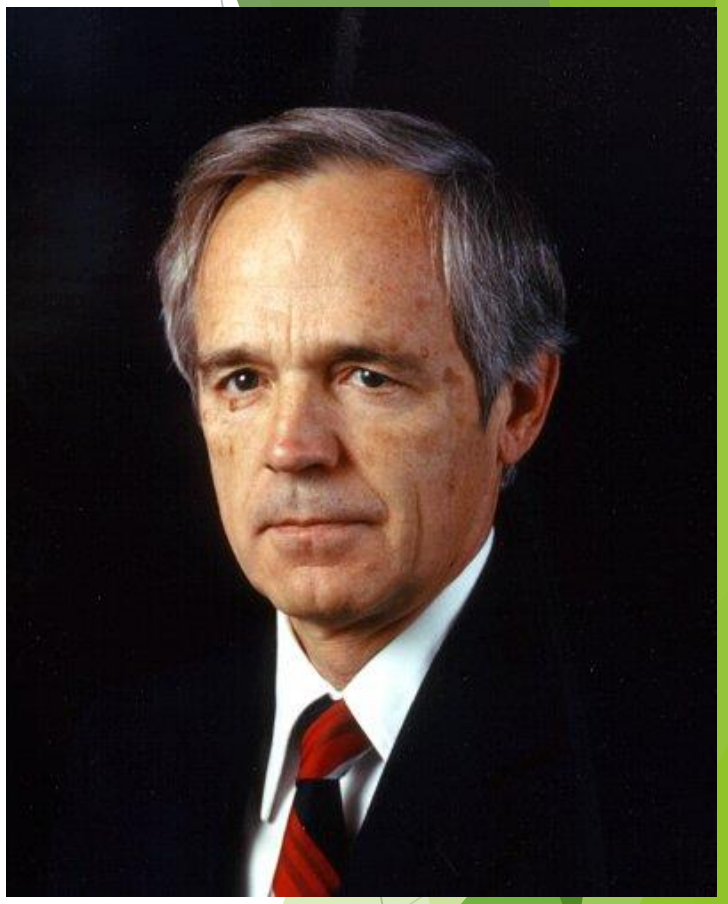
- Lockheed Martin is a global security and aerospace company involved in every step of creating and maintaining products
- Their main customers are agencies of the USA government- US Army, Navy, and Air Force
- Several of their current aircraft products include the C-141, F-16, and the F-22
- They also make products in many other fields, including ground vehicles, missiles, and missile defense
- Lockheed Martin website

- ATK stands for Alliant Techsystems, which is a company which makes and develops products in the markets of aerospace, defense, and sporting
- Their products are more of the small details on bigger ideas, such as antennas for stealth fighters and other tactical aircraft
- However they also make bigger products, such a small satellites, with four series- A100,200,500,700
- ATK Website

Sam Williams

- Sam Williams was an engineer who never worked for big company, but developed all of his products with private funding on his own
- Sam helped develop a Navy turboprop and the automotive gas turbine while with Chrysler
- He invented the small gas turbine on his own which helped to later make the cruise missile and affordable business jet aircraft
- He received the Collier and Wright Memorial trophies as well as the National Medal of Technology



Hellmuth Walter

- Hellmuth Walter was a German engineer who lived and invented during the 1930s and 1940s
- Came up with the ideas for rocket engines, which got better as WWII went on, and was used in the German fighter, the Messerschmitt Me 163
- Also used his knowledge in developing submarines, and launching systems for missiles
- Published over 200 patents, and received numerous scientific awards and medals during his life

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