

Personal Statement

A work placement at Airbus and experience gained from an aviation scholarship confirmed my long-held aspiration to work in aerospace engineering. I am constantly amazed that a difference in pressure can generate enough lift to counteract the weight of an A380. From flying lessons in a 747, to microlights and paragliding, I love every aspect of making things fly.

Independently from school, I applied for a place on the highly competitive work placement scheme at Airbus and was selected to spend a week in their design offices. I was really excited by the new composite materials and the innovative solutions that are being developed to counter current issues such as galvanic corrosion and the lack of Faraday cage effect when using composites. I was awarded a Silver Industrial Cadet Award, and presented to a room of engineers about the exciting projects I had learnt about during the placement, receiving positive feedback from my department mentor. I also won a William Sharpe Aviation Scholarship where I had the opportunity to go behind the scenes of companies such as Rolls-Royce. Speaking to many different engineers during the week inspired me to pursue aerospace engineering. I have experienced flying a 747 simulator at Heathrow as well as several lessons in a microlight; a complete contrast but just as amazing. This has given me a real appreciation of the aerodynamics of such different aircraft. In order to further my interest in new aviation technology, I am currently undertaking an Extended Project Qualification in addition to my 4 A-levels, where I am exploring the question "What role have winglets played in improving wing design?" My independent research enables me to learn more about aerospace engineering, as well as developing key analytical and writing skills. Looking to broaden my knowledge, I subscribe to Flight International magazine and am a Royal Aeronautical Society student member, learning about current aeronautical affairs and keeping up-to-date with the latest technologies.

I am particularly looking forward to the individual and group projects in the engineering course, where I can use my creative, teamwork and leadership skills to develop new aircraft designs. My creative skills were demonstrated in my individual GCSE Technology project, designing and building a small sit-on aeroplane. I particularly enjoyed the challenge of designing the mechanism for rotating the propeller when the wheels turned, and received full marks for my completed aeroplane. Keen to use my problem-solving skills in a team challenge, I participated in a STEM competition to design and build a rocket. My leadership skills (previously gained from running rehearsals for large groups of students as a House Music Captain) equipped me to lead our team to a successful rocket launch. I also enjoyed participating in a regional technology challenge to design a weight-powered vehicle, in which my team came 2nd. I listened to others' views and spurred our team's progress, using experience from my Duke of Edinburgh expedition when I solved disputes by calmly encouraging a solution. My excellent communication skills were very useful in this situation. I have also learnt to be versatile in communication- when chosen to be a school Physics Ambassador, I organised activities with both teachers and fellow students to promote my subject. I perform well under pressure having been a member of Aylesbury Youth Orchestra as a grade eight violinist.

In conclusion, I am very excited by the prospect of being able to apply the concepts learnt about aerospace engineering to build and test my own projects, both at university and then for aeronautical companies such as Airbus. I'm thrilled about the future concept ideas that are developing and want to pursue new ideas that could shape the future of aircraft design.