



Placement Position at AgustaWestland

Name: James Parr Degree Course: Aerospace Systems Engineering MENG (Hons)

Who did you do your placement with? I completed my placement year with AgustaWestland.

How did you get the placement position? I sent my application to the company in September and was delighted to receive a letter inviting me for an interview in January. After a successful interview and a few months of waiting I received a further letter offering me a position within the undergraduate placement scheme starting in June.

What do you see as the benefits of your year out on placement? The placement year allowed me the opportunity to gain paid industrial experience to strengthen my CV giving me an advantage when applying for graduate employment. It allowed me to apply the skills and techniques gained during my studies in an engineering environment. It also gave me the opportunity to work alongside engineering experts to further my knowledge of the subject which will complement my studies upon return to university.

How did the work vary over your placement? The Undergraduate scheme is structured so that each undergraduate will undertake four 3-month placements in departments which are best suited to their interests. I expressed an interest in both design and test aspects of engineering

What work did you have to do? An overview of the work I undertook throughout my four 3-month placements is listed below.

Transmissions Design Department: I assisted senior design and stress engineers in the design of vertical lift transmission components. I assisted in the detail design of components used in vertical lift transmissions systems. I also performed calculations to size components for static and fatigue strength purposes. I presented my findings and conclusions to senior staff.

Transmissions Test Department: I supported senior test engineers in the design and setup of transmission test rigs. I undertook the installation and setting to work of the transmissions system within the test rigs. I assisted senior test engineers in the operation of testing the transmissions system. I gained experience in dynamic fatigue and endurance testing for transmissions systems and components for design and first flight clearance. I was fortunate enough to completed 100 hours of dynamic fatigue **testing for the clearance of the AW159 'Wildcat' Transmission system for first flight. I also gained experience in developing test schedules and overseeing static testing for design and flight clearance purposes.**

Lynx Structures Department: I assisted senior design and stress engineers in the design of structural components. **I analysed the key structural components of the AW159 'Wildcat' to determine the life of each component and in turn calculate the time period between the maintenance and servicing of each structurally significant item.** I documented my results and submitted a report summarising the inspection and maintenance periodicities of the structural significant items on the aircraft.

Structural and Mechanical Test Department: I supported senior test engineers in the design and setup of structural test rigs. I assisted in the installation of structural components into their required test rigs. I supported and monitored the dynamic and static testing of structural components for design and flight clearance.

What was the most important thing you learned from your placement? My placement has shown me that in order to create and develop a successful career in industry, a competency in both interpersonal and communication skills are essential. The engineering industry requires the close communication and discussion of ideas, thoughts and processes to complete a task in hand.

Would you recommend doing a placement to other students? The year in industry has given me the opportunity to experience different aspects of engineering both practical and design. It has allowed me to gain a better understanding of what I want to do after graduating from university. I would **recommend doing a placement year to other students, even if you're not sure what you want to do after graduation, a year in industry will earn you respect and give your CV the competitive edge.**