

MR. WESLEY COUGHLAN

**A400M FUEL MANAGEMENT LEAD
ENGINEER
AIRBUS, BRISTOL, UK**

www.airbus.com



Education and Training

- B. Eng. (Hons) Aeronautical Eng, University of Limerick, Ireland, 2003
- MSc Aerospace Dynamics specialising in Flight Dynamics, Cranfield University, 2006

Current Position

Title	Dates	Employer
A400M Fuel Management Lead Engineer	May 2014 - Present	Airbus, Bristol, UK

Previous Positions

Title	Dates	Employer
Fuel Systems Control Engineer	Apr 2008 - May 2014	Airbus, Bristol, UK
Systems Design Analyst	Oct 2006 - Jan 2008	Pennant Training Systems Ltd, Cheltenham, England

"Home" Town(s)/County(s)

Cheltenham, England
Cork, Ireland

Please describe your current job

My job at Airbus's fuel systems design office in Filton involves managing and coordinating the technical activities of the fuel management development team. I ensure successful development, implementation, integration and testing of the design within the project constraints. I provide support to the test team during system integration and during design verification activities on our avionics bench. I also review system level interface documents, prepare development test requirements, analyse flight/bench test data to troubleshoot technical issues, raise problem reports to our supplier to solve any issues and provide

weekly technical status reports to my group leader and project manager.

I support our supplier during the development process ensuring our functional requirements are correctly captured and ensure problems reports have been successfully implemented within the software via bench testing.

In addition to my role as lead engineer I am also the main focal point for A400M fuel system model. This involves working closely with our modelling team in India and supporting them during model updates and addressing any problems found with our models on the many testing platforms.

Finally, I provide support during ground testing of the aircraft. This happens at the FAL (Final Assembly Line) in Seville, Spain, where the aircraft is assembled piece by piece. Currently, the A400M is undergoing quite a lot of intensive systems testing and this presents a lot of opportunities for me to get involved so I've been to Seville quite a few times now. This type of work is a lot more practical and a great way to see the fruits of our hard work! The testing involves exercising the many fuel system functions. This is done by using the cockpit multi-function displays and overhead fuel panel controls that interface with the fuel system avionics.

Please describe your career path since graduating with your B.Eng. Aeronautical Eng.

Before completing my BEng it was always my intention to take a gap year and travel abroad. I never once regretted my decision to go travelling after UL as now I would find it extremely difficult to take a year out now when employed full-time!

After this year out my plan then was to go on to pursue a postgraduate course at Cranfield University in the UK. By doing so I felt I would better my chances of gaining work after completion with this additional qualification. And so, very soon after completing my MSc in Cranfield I began working for a small company called Pennant Training Systems Ltd in Cheltenham, working as a Systems Design Analyst. While there I primarily wrote requirements specifications for software developed for a virtual aircraft maintenance training system.

After my contract with Pennant finished I found work with Airbus working on the A400M programme. For my first role I was responsible for defining the interface data between the fuel system avionics and other external avionic systems on the aircraft such as Flight Management System and Flight Warning

System. After spending about 18 months working in this role I moved on to work on the fuel management system within the same department where I remain today as Lead Engineer

What made you decide to study Aeronautical Engineering at UL?

While at secondary school my ambition was to pilot aircraft for a living. But for numerous reasons, namely poor eye-sight, this just wasn't meant to be. However, I still longed to work within the aviation world so I did some research while at a school and I found that I could study Aeronautical Engineering at UL.

Are you glad you did?

Most definitely yes! - I gained an excellent qualification that stood me in good stead for attaining work later. In addition to this, I met a great new circle of friends, some of whom I still keep in contact with to this day.

What did you most enjoy about studying at UL - academically, and also non-academically?

I thoroughly enjoyed the week we spent at Shannon Airport flying in the BAe Jetstream 31 during our Flight Laboratory course hosted by Cranfield University.

Studying aside, I had the best four years ever with socialising with friends and keeping fit at the University Arena.

Where did you do your COOP?

I did my co-op with a company called FLS Aerospace based at Dublin Airport. Initially, I worked alongside a fellow colleague in developing a database used to record shipping charges. After this I was offered a position at Line Maintenance which I gladly accepted. Here I was responsible for the daily line maintenance planning of the Aer Lingus single-aisle fleet. While there I had the opportunity to observe the routine maintenance that was carried out that entailed anything from checking APU (Auxiliary Power Unit) oil levels to carrying out an emergency electrical systems check within the cockpit.

I was also lucky enough to experience two engine grounds runs, one on a A320 and the other on a B737. All in all, working on the line afforded me with first-hand experience of aircraft types such as the A320. So, by the time I came to work with Airbus I was pretty familiar with Airbus aircraft and cockpit systems and quite a few of their never-ending list of acronyms!

What advice would you give school-goers considering choosing Aeronautical Engineering?

If your passion (or obsession) lies within aviation then you will not go wrong by choosing to study Aeronautical Engineering at UL. As with the majority of engineering courses you will be required to work hard and Aero Eng is by no means an exception here. But you won't be alone, as help from faculty members and fellow colleagues is always at hand. So, if you enjoy studying the likes of physics and don't mind the maths and you are plane mad then Aero Eng could be the course for you.

What advice would you give future graduates of Aeronautical Engineering?

If jobs are few and far between then don't fret! Get your CV out to as many companies and agencies as possible and with a lot of perseverance and a bit of luck the job you're looking for will turn up.

Start your job search early in your final year and ensure you also look to vacancies abroad too. Hopefully by the time you graduate you will have some idea of what area of the business you're targeting for as there is quite a broad spectrum of jobs to choose from within this industry. For me my co-op experience steered me towards my chosen discipline i.e. working within aircraft systems engineering.