

**MR. PIO FITZGERALD**

**PROGRAM INTEGRATION  
 MANAGER 747-8  
 BOEING COMMERCIAL AIRPLANES,  
 BOEING COMPANY, SEATTLE, WA,  
 USA**

[www.boeing.com](http://www.boeing.com)



**Education and Training**

- Private Pilot Licence, Million Air Flight School, Teterboro. NJ, USA, 1994
- B. Eng. (Hons) Aeronautical Eng, University of Limerick, Ireland, 1999
- MSc Aerospace Dynamics, Cranfield University, 2000
- PhD Control Law Design, Cranfield University, 2004
- Instrument Rating, Boeing Employees Flying Association, Seattle, WA, 2008
- Commercial Pilot License, Regal Air, Everett, WA, 2009
- Multi-Engine rating, Regal Air, Everett, WA, 2010

**Current Position**

Title	Dates	Employer
Program Integration Manager 747-8	Feb 2012 - Present	Boeing Commercial Airplanes, Boeing Company

**Previous Positions**

Title	Dates	Employer
Lead Engineer - 747-8 Primary Flight Control Laws	Sep 2005 - Feb 2012	Boeing Commercial Airplanes, Boeing Company
Engineer - 777 Primary Flight Control Laws	Jan 2005 - sep 2005	Boeing Commercial Airplanes, Boeing Company
Technical Manager	April 2002 - April 2004	Stirling Dynamics Inc, Seattle WA, USA
Dynamics Engineer	May 2001 - April 2002	Stirling Dynamics Inc, Seattle WA, USA
Engineer - S-92 Autopilot Control Laws	November 2000 - February 2001	Sikorsky, Bridgeport CT, USA
Flight Test Engineer	August 1997 - January 1998	Boeing Commercial Airplanes, Boeing Company
Certification Engineer	June 1997 - August 1997	Boeing Commercial Airplanes, Boeing Company

*Graduate Profile, Aeronautical Engineering, University of Limerick, Ireland*  
**PIO FITZGERALD**

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

Killarney, Co. Kerry, Ireland  
Seattle, WA, USA

**Please describe your current job**

As a Program Integration Manager for Boeing's 747-8 Program based in Everett Washington (USA) my job is to facilitate integration across the various engineering disciplines and provide technical leadership to the engineering teams. This job is a dream come true for anyone who grows up dreaming of designing airplanes. My work puts me in contact with the best aeronautical engineering minds in the world while working on the most iconic airplane in the commercial fleet. Rarely do I have two days which resemble each other - my days are filled with interactions with the various engineering teams, manufacturing, flight test, delivery support, regulatory agencies, and customers.

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

After graduating from UL I pursued an MSc in Aerospace Dynamics at Cranfield University in the UK. After leaving Cranfield I worked for a brief period with Sikorsky on the S-92's autopilot control laws in Connecticut USA. I returned to the UK to work for Stirling Dynamics Ltd in Bristol. While at Stirling Dynamics I worked on exciting projects such as a mid-life upgrade of a supersonic fighter aircraft. After a year in Bristol I moved to Seattle for 2 years to work as a Technical Manager and also in Business Development for Stirling Dynamics. This was a fantastic opportunity to expand my skills beyond pure engineering. Then I took a brief sabbatical from work to complete my PhD which was focused on autonomously landing unmanned airplanes on aircraft carriers. I then joined The Boeing Company in Seattle as a flight controls engineer working on the 777-200LR. For my COOP during my B.Eng. I worked in Seattle for Boeing as a Certification Engineer and a Flight Test Engineer, so in many ways returning to Boeing was like coming home. Control laws are the algorithms which determine the airplanes response when the pilot moves the controls in the flight deck. Within a year of returning I started to work on the newly launched 747-8 Program and became the Lead Engineer for the primary flight control laws. The next six and a half years were pure magic as I led the primary control law team through the design, development and testing of the primary flight control laws. In February 2011 I was named **Boeing Commercial Airplanes Engineer of the Year** for 2010 for my work leading a multidisciplinary engineering team through the development of a control law solution to a very subtle vibration which was detected while flight testing the 747-8F. After 7 years as a Flight Controls

Engineer I recently transitioned to the role of a Program Integration Manager for the 747-8 Program.

**What made you decide to study Aeronautical Engineering at UL?**

When I was 5 years old I fell in love with airplanes. From then on I knew that I would spend my life working with airplanes. I spent a lot of time in my youth reading about airplane design. It was a very natural choice to pursue Aeronautical Engineering at UL.

**Are you glad you did?**

YES. Without the excellent education that I received at UL, where I learned the fundamental building blocks of aeronautical engineering, I would not be where I am today.

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

I really enjoyed the fundamental aeronautical engineering subjects, the flight laboratory and the experience of COOP.

**Where did you do your COOP?**

I spent my COOP at The Boeing Company in Seattle working initially as a Certification Engineer and then as a Flight Test Engineer. As a Certification Engineer I learned about the regulatory process. As a flight test engineer I was involved in test planning and execution. I spent many happy days flying around the USA on 737-NG airplanes demonstrating the airplane's autoland capability in varying weather conditions. Those experiences set alight my interest in flight dynamics and control law design.

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

If your passion is in the aerospace industry, and you like maths and physics, then Aeronautical Engineering may be a really good fit for you. In the past Ireland was not known for its airplane design industry, but since the inception of the Aeronautical Engineering degree at UL graduates have been contributing at the highest levels in the global industry. If you want to design airplanes this is for you.

**What advice would you give future graduates of Aeronautical Engineering?**

Work hard. Pursue education on a daily basis. Keep your outlook positive, believe in your abilities and go about your daily business with gratitude.

