



# **York Society of Engineers**

**7:30 pm. Thursday 15 February 2024**

**Live Lecture**

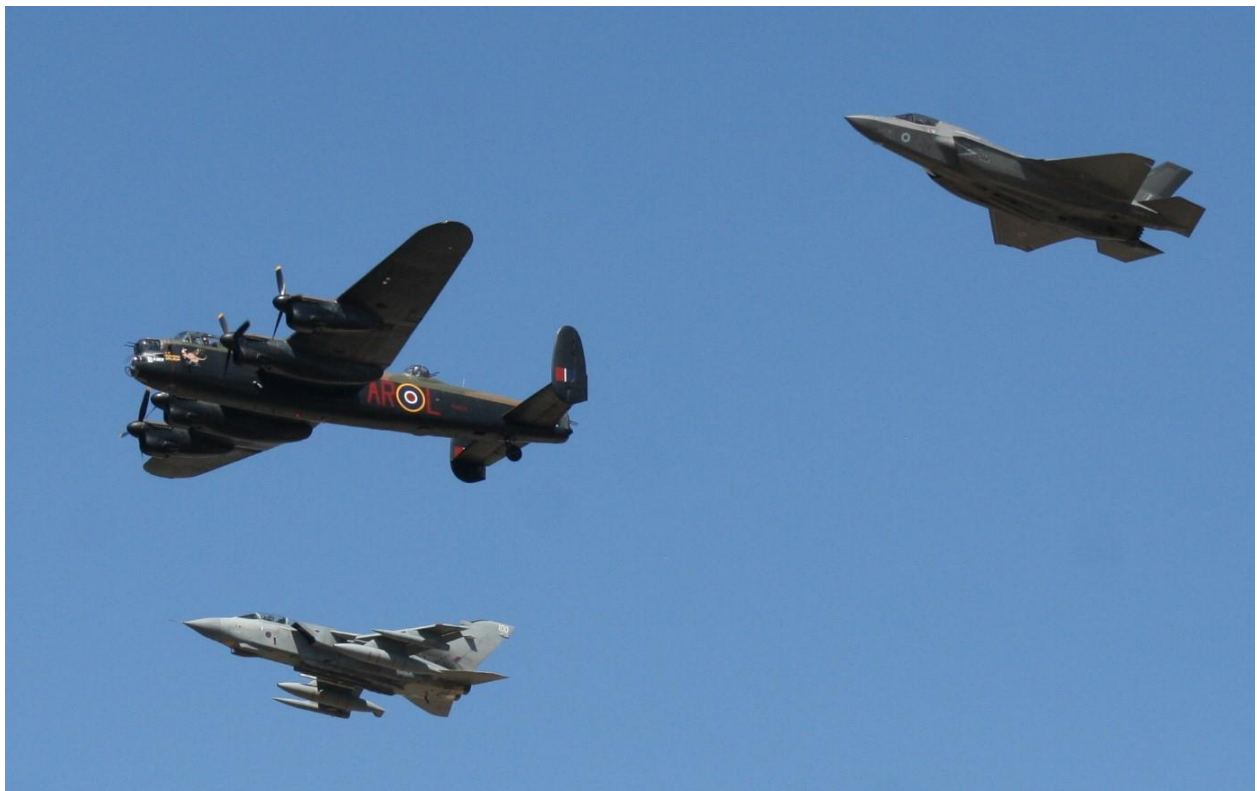
**Room P/L/001, Physics/Electronics Building, Campus West, University of York**

**Materials and manufacturing in Aerospace and Defence,  
Past, Present and Future**

by

**Chris Botting**

Chief Materials Engineer at Marshall Aerospace



Chris has over 20 years' experience as a Materials Engineer in both the automotive and aerospace sectors, beginning on the Lotus Cars graduate scheme. He obtained a 2:1 honours degree in Biomedical Materials Science and a Masters in The Science and Engineering of Materials from the University of Birmingham. He has worked in a variety of roles including process engineer, design engineer and structural adhesives engineer before joining Marshall aerospace in early 2015 as a Materials engineer. He is a chartered engineer through the Institute of Materials and became a Fellow of the Institute back in 2018.

His specialities include joining technologies, surface coatings, corrosion protection, composites and metallic and non-metallic materials as well as environmental legislative compliance, for example, the Registration Evaluation, Authorisation of Chemicals (REACH) regulation. He has worked on many projects across all businesses in the Marshall group including Aerospace, Land Systems and Advanced Composites and continues to support projects in all domains.

He led the introduction of polymer Additive Manufacturing and its subsequent approval by the Civil Aviation Authority (CAA) for use on flying parts back in 2018 and is currently leading research and development (R&D) activities into metallic Additive Manufacturing and subsequent CAA approval. In addition to this he is leading several other R&D projects in collaboration with Cambridge and Cranfield Universities. These have provided the opportunity to integrate new technologies into Marshall processes and Chris is always seeking ways to implement these into Marshall projects.

He is a member of the Cranfield University Advanced Materials Industrial Advisory Board and has delivered lectures on Materials engineering at Nottingham Trent, Cranfield and Hertfordshire universities.

Chris's talk will cover:

- His career to date at Lotus Cars and Marshall Aerospace
- Composites and materials in sports cars
- Materials in aerospace
- Future materials
- Additive manufacture and material

There will be an opportunity for questions and answers at the end of the talk.

**Please note, this lecture will be a live talk in Room P/L/001, Physics/Electronics Building, Campus West, University of York.**

Wearing of masks is encouraged (but not mandatory); taking a lateral flow test prior to the meeting (with negative result) is also recommended. There is plenty of space in the lecture theatre for "social distancing".

**Please see the Covid-19 guidance below from the University of York:**

The safety of our audience members and staff are our priority, and the University of York continues to have strict cleaning regimes and enhanced ventilation in place.

Please note that the University of York is promoting a message of protect, respect and be kind in relation to Covid-19 and we therefore politely ask that all attendees consider wearing a face covering whilst moving around indoors, washing hands regularly and taking a lateral flow test in advance of the event. We also ask that you do not attend if you experience any symptoms that could relate to a Covid-19 infection OR if you are self-isolating. Events staff will wear face coverings (unless exempt) and clear signage will be available to access hand sanitizer and hand washing facilities.