



## Tods Aerospace Develops Lightweight Damage Resistant Composite Fuel Pipe Assemblies

YEOVIL, UK, 16 May, 2017 – Tods Aerospace, a Unitech Aerospace Company and leader in advanced composite materials technologies, has completed an 18 month project to develop lightweight damage resistant composite fuel pipe assemblies that by virtue of their tightly controlled electrical properties can be used safely in composite aircraft fuel tanks. The project was part funded by the UK National Aerospace Technology Exploitation Programme (NATEP) and supported by Airbus Operations Ltd. The contributing partners were Technical Fibre Products (TFP), Element Materials Technology and ENL Ltd.

The adoption of composite fuel pipe assemblies has the potential for weight savings over metallic equivalents however further weight and cost reductions are possible not only by optimising the composite materials and manufacturing process, but also by introducing novel means of achieving the tightly controlled electrical properties.

The materials and techniques developed for manufacturing the pipe assemblies have been chosen to enable automation of the process to allow efficient mass production. A static and fatigue test program has demonstrated that thin wall composite pipes with conductive injection moulded end-fittings can easily withstand internal and external pressure load cases and are highly resistant to impact damage and fatigue cycles.

“Tods Aerospace strives to be a major contributor to advancing composite technology and we are very proud of this accomplishment as it speaks to the ability and innovation of our hardworking team,” said Pete Eckersall, Vice President and Managing Director for Tods Aerospace.

NATEP is a £40 million technology development program derived from a bid by the Aerospace Growth Partnership to the Government’s Advanced Manufacturing Supply Chain Initiative. The goal of the program is to mature undeveloped aerospace technologies and increase manufacturing jobs in the UK.

### **About Tods Aerospace**

Tods Aerospace specializes in advanced composite materials technology for aerospace applications. The Yeovil, UK based team enhances the performance of vital defence systems,

---

For More Information, Please Contact: Meredith Williams

Marketing and Communications Manager | [mwilliams@unitech-aerospace.com](mailto:mwilliams@unitech-aerospace.com)



aircraft interiors and air transport equipment worldwide through design, engineering and manufacturing. Tods Aerospace is a Unitech Aerospace Company.

**About Unitech Aerospace**

Unitech Aerospace provides the aerospace, marine, medical, defense, nuclear and rail industries with composite and metallic structures and components that meet demanding and complex requirements. The company's growing global footprint is currently comprised of strategically located sites providing local and immediate support to customers. Integrated solutions range from early stage design, rate production, to full-term sustainment making Unitech Aerospace the industry's trusted lifecycle partner.

---

For More Information, Please Contact: Meredith Williams

Marketing and Communications Manager | [mwilliams@unitech-aerospace.com](mailto:mwilliams@unitech-aerospace.com)