## Boeing helps open thermoplastic composites research lab in the Netherlands

## Boeing helps open thermoplastic composites research lab in the Netherlands

ENSCHEDE, Netherlands, June 26, 2012 – A new laboratory that provides thermoplastic composites research for Boeing [NYSE: BA] and other aerospace companies has opened at Enschede in the Netherlands.

"With this opening, the Thermoplastics Composites Research Center, or TPRC, is no longer a virtual institute," said William Gerry, who represents Boeing as chairman of the TPRC board. "The TPRC research team is now housed in an outstanding facility that will enable them to do the precise measurements that are necessary to conduct innovative research into thermoplastic composites for a broad range of markets."

Boeing, Fokker, Ten Cate Advanced Composites and the University of Twente signed an agreement three years ago to establish the TPRC at the university. The agreement called for the TPRC to accelerate scientific and technological developments for new applications of thermoplastic composites, principally in the aerospace industry.

Since then, the TPRC community has focused on adding new members for research, both nationally and internationally, with special emphasis on subject matter experts. In addition to the four founding partners, five companies have joined the TPRC consortium - Instron, DTC, Pinette, Aniform and Italmatic. Besides the aviation industry, these companies come from diverse areas such as equipment manufacturing, mechanical engineering and materials development.

The TPRC community shares and disseminates knowledge of thermoplastic composites by organizing conferences, training and courses for students, researchers and the industry. Currently, 15 people work at the TPRC, and the staff is expected to grow to 20 by the end of this year.

Boeing has invested in the TPRC to increase its supplier base in the area of thermoplastic composites. The TPRC is aimed at providing Boeing customers with access to accelerated development and use of thermoplastic materials and processing technologies, world-class suppliers and aircraft components at reduced cost, cycle time and weight.

All consortium members allocate an equal share in joint research projects. The University of Twente serves as host for the TPRC, and a dedicated TPRC staff manages its day-to-day operation and research projects.

The concept of the TPRC is that different parties collaborate with each other within the thermoplastic composites supply chain. Research not only involves the aerospace industry but also a broad range of end-use markets such as wind energy, oil and gas, automotive, medical, machinery, infrastructure, sports and marine. The TPRC enables researchers and developers to work together closely on open innovations and use each other's research equipment.

"Boeing has a long and rich history of partnership with many suppliers and customers in the Netherlands," said Marlin Dailey, president Boeing Germany, Northern Europe, European Union and Africa. "We value the Dutch technical expertise, and this initiative with Dutch industry and academia helps us advance innovative aerospace technologies that improve our global competitiveness."

The effort to establish the TPRC began in 2008, when Boeing, Ten Cate, Fokker and the University of Twente began collaborating on two joint research projects that involved materials used in thermoplastic composites, as well as joining/bonding methods.

The use of thermoplastics is growing significantly in the aerospace industry, whose customers want products that are lighter, more cost efficient and environmentally progressive. Companies like Boeing are looking for innovations that will accelerate development of thermoplastic composites technologies and spur their deployment into product lines quickly and efficiently.

The TPRC is one of many research consortiums that Boeing is participating in around the world. As such, the TPRC is able to tap into a global network of research centers and consortia to exchange information and engage in collaborative research projects.

In addition to the TPRC, the research consortia include the Advanced Manufacturing Research Center with the University of Sheffield (UK), the Integrated Vehicle Health Management Center with Cranfield University (UK), the Direct Manufacturing Research Center with the University of Paderborn (Germany), and the Advanced Forming Research Center with the University of Strathclyde (UK).

Boeing Research & Technology (BR&T) provides funding and technical expertise to the consortia. BR&T is the advanced, central research and development organization of Boeing. It provides innovative technologies that enable the development of future aerospace solutions while improving the cycle time, cost, quality and performance of current aerospace products and services.

In addition to the consortia, BR&T has research centers in Australia, China, India, Russia and Spain.

## **Contacts:**

Eszter Ungar Boeing International Communications – Brussels, Belgium +32 2 777 07 26 eszter.ungar@boeing.com

Daryl Stephenson Boeing Research & Technology Communications – St. Louis, USA +1 314-232-8203 daryl.l.stephenson@boeing.com

Follow us on Twitter <a>@Boeing</a> More information: URL

Photo and caption are available here: <a href="http://boeing.mediaroom.com/index.php?s=64&item=xx">http://boeing.mediaroom.com/index.php?s=64&item=xx</a>