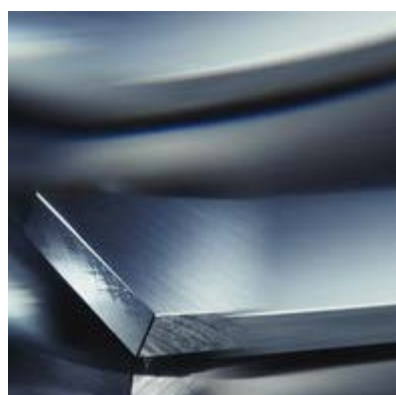
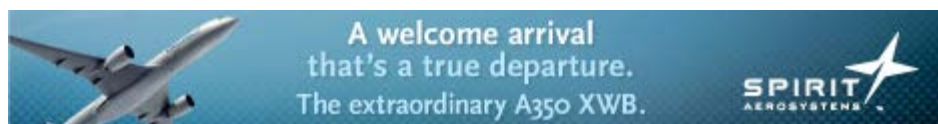
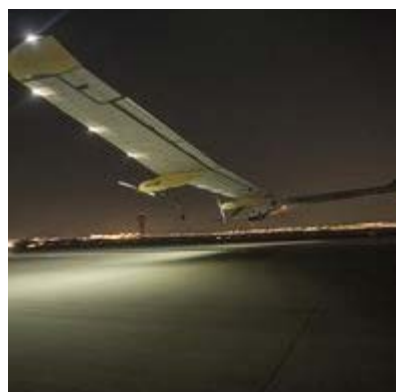


**From:** SAE Customer Service  
**Sent:** Monday, August 12, 2013 1:31 PM  
**To:** Stephanie Stroud  
**Subject:** Aerospace Engineering Technology eNewsletter August 2013



#### Aluminum in the air

Constellium provides a close focus on how waste material is recovered and reused through the supply-chain manufacturing process up to the time when the airframe is eventually dismantled after a lifetime of service use. [Read full story](#)



#### Solar Impulse team's next challenge: To circle the globe

The next world-girdling version of the fuel-less flier will rely on featherweight polymers and composites. [Read full story](#)

#### [Improve RADAR System Design and Test](#)

Body: Designing and testing RADAR systems requires a sophisticated combination of hardware and software. Discover how to simulate the front end of a RADAR system in software and prototype the same system using physical hardware to accelerate the testing of new RADAR technology. Examples of this technology include sophisticated signal processing operations to determine the velocity of the target and ways to mitigate some of real-world environmental conditions. Watch the webcast.

#### Fine-tuning vibro-acoustic countermeasures in a turboprop aircraft

Turboprop engines are gaining popularity for their fuel-consumption advantages, but they also generate substantial noise, so reducing cabin noise to ensure passenger comfort is an important engineering challenge. [Read full story](#)



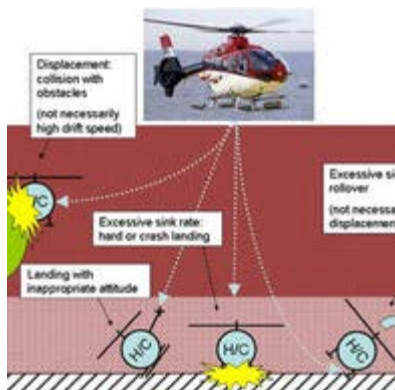
### [Dual Function Valve](#)

The Lee Company's new 375 PRI@Chek® Valve combines the function of a pressure relief valve in parallel with a check valve into one easy to install insert. The relief valve function features a rugged Tungsten Carbide ball and a 440C seat for durability and long life. The remaining components are constructed entirely of stainless steel. The valve is available in a range of relief flow cracking pressures for system pressures up to 5000 psi.



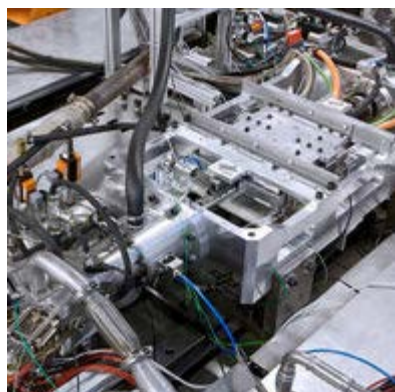
### **Aerospace to help ignite 3-D printing boom**

Touted as an enabling platform for applications ranging from personalized medicine to personal drones, 3-D printing will grow to an \$8.4 billion market in 2025—up from \$777 million in 2012, according to a recent report by Lux Research. [Read full story](#)



### **The DEVILA is in the details of software integration for safety avionics**

The decreasing relative cost of electronics and the pace of electronics development have significantly increased the need to adopt modern commercial off-the-shelf computing architectures in avionics. [Read full story](#)



### **Free-piston IC generator developed for range-extender hybrids**

In this engine developed at Germany's DLR, pistons cycle back and forth through a linear generator to augment battery power. [Read full story](#)

### **The changing face of manned spacecraft**

The key to sustainable space transportation is reliable, safe, and affordable vehicles that can be used over and over again in much the same way





that global air transport is accepted today. [Read full story](#)

[REASON #2: Compact rectangular form factor saves space and weight.](#)

See the Top 10 reasons why you should be using the new DEUTSCH 369 Series Connectors. Only from TE Connectivity. Learn more at [te.com/369series](http://te.com/369series).

[JEC Americas Composites Show & Conferences](#)

[Composite industry leaders from around the globe return this fall for the second edition at the Boston Convention and Exhibition Center, Oct. 2—4, 2013. This event provides the region's premiere venue for composites professionals to gain a competitive edge in this important market.](#)

**Aerospace Engineering Products & Services from SAE International®, publisher of *Aerospace Engineering*™**

- Register by September 6, 2013 and SAVE!  
[SAE 2013 Aerospace Government and Industry Meeting](#)  
September 23, 2013 • Montreal, Quebec, Canada
- Plan now to attend the [SAE Seminars](#) held in conjunction with the 2013 AeroTech Congress & Exhibition, Montreal, QC, Canada  
Sep 23-24: *New!* Understanding the FAA Parts Manufacturer Approval Process  
Sep 23-24: ARP4754A and the Guidelines for Development of Civil Aircraft and Systems  
Sep 23-24: *New!* Understanding and Supporting Aircraft Accident Investigation and Reconstruction
- Helping Aerospace Companies Take Flight • [store.sae.org](http://store.sae.org)  
Since 1916, SAE has been the industry's leading provider of technical papers, quality standards and material specifications—the critical information that has helped hundreds of companies to innovate and grow.
- *NEW BOOK:* [Automated/Mechanized Drilling and Countersinking of Airframes](#)  
The focus of this book is on automating the process of drilling and countersinking holes during airframe manufacturing. Print and eBook available.
- SAE Standards Development Committees seeking volunteers: System Engineering • Reliability, Maintain-/Support-/Probabilistic Methods • XML Data Dictionaries/Documents • Electromagnetic Environmental  
[Express interest.](#)

SAE International • 400 Commonwealth Drive • Warrendale, PA 15096-0001 USA

Let the editors know what you think of this Technology eNewsletter by [clicking here](#).

If you would like to stop receiving this Technology eNewsletter, [click here](#).

For details on our commitment to your privacy, [click here](#).

2013 Aerospace Engineering Technology eNewsletter schedule: February, April, June, August, October, December

Copyright © 2013 SAE International