



## Terrafugia Press Release: 5/12/2006

### Hinge & Locking Mechanism Passes Design Review

May 12, 2006 – Cambridge , MA

Preliminary design of the Transition<sup>®</sup>'s internal systems is proceeding according to the development schedule, with the 1st generation wing design led by Mr. Milo Mracek, Terrafugia's senior design engineer. Designing the folding and locking mechanism for the Transition's wings continues to be an enjoyable challenge for Mr. Mracek, whose career included significant work (from conceptual design to flight hardware implementation) on the multiple-fold wing mechanisms currently in use on many of the Nation's missile systems. Several of the lessons learned from these projects are being brought to bear on the Transition<sup>®</sup>.

On May 12, 2006 Terrafugia conducted a PDR of the wing folding mechanism. This review was a critical step in mitigating the concerns expressed by members of the pilot community surrounding an automatic folding wing on a general aviation (GA) aircraft.

Terrafugia is pleased to report that the preliminary design of the folding and locking mechanism is moving forward to the detailed, piece-part design stage. Once the detailed designs of all the specific parts have been isolated and analyzed using finite element analysis techniques, key areas for weight reduction will be identified and the design will move on to the critical review stage and manufacturing analyses.

Various components of the folding mechanism, which features a single actuator drive for each wing and locking pins that will be visible to the pilot during pre-flight checks, will now move into the prototyping stage.

Says Mr. Mracek: "With fifty years of aircraft and aerospace engineering design experience, I have the highest level of confidence in this system." Going on he adds, "The prime requirement for every design I've worked on has been safety of flight. This mandate is embedded in every aspect of this system - just as it has been successfully incorporated into all of the proven hardware that has resulted from my previous efforts in support of the Nation's military and defense systems."

By isolating this design early in the development of the Transition<sup>®</sup>, Terrafugia is significantly reducing the risk of the project and shortening its overall time-to-product.

#### About Terrafugia

Terrafugia, which is derived from the Latin for "escape from land," was founded by graduates of the Department of Aeronautics and Astronautics at the Massachusetts Institute of Technology and the MIT Sloan School of Management. Terrafugia was incorporated in 2006. Based in Woburn, Massachusetts, Terrafugia combines solid aircraft design fundamentals with a focus on creativity and customer service.

More information is available online at:  
[www.terrafugia.com](http://www.terrafugia.com)