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Amelia Earhart Fellowship Program

A Zonta International program, funded by the Zonta International Foundation

The Zonta International Amelia Earhart Fellowships were established in 1938 in honor of Amelia Earhart, famed pilot and member of the Zonta Clubs of Boston and New York. The Fellowships are made annually to women pursuing graduate Ph.D./doctoral degrees in aerospace-related sciences and engineering.

2007 Fellows

SHANNON MARIE STATHAM

Citizenship: USA

Proposed Program: Aerospace Engineering at Georgia Institute of Technology

Ms. Statham will use her fellowship to further her research on the Drilling Automation for Mars Exploration (DAME) project, sponsored by NASA. This project started in 2003 for the purpose of developing a drill that could operate on Mars in a totally automatic mode and drill into a crater with limited available power. Ms. Statham has developed a completely autonomous structural health monitoring system for the drill. She has done this by performing vibrational analysis on the drill using Laser Doppler Vibrometers, training Neural Networks and developing automated software. She participated in the demonstration field test of the system at the remote Houghton Crater on Devon Island, Canada. Currently she is modifying the system for use on a rover and continuing to refine the health monitoring system. Ms. Statham has been an officer in student sections of the Society of Women Engineers since 2002.