JASC presents at the annual AIAA Joint Propulsion Conference

August, 2008 - JASC once again attended the American Institute of Aeronautics and Astronautics (AIAA) Joint Propulsion Conference (JPC) that was held in Hartford, CT this year.

The aim of this year's conference was "… to identify and highlight the propulsion systems, components, and technologies required to enable the next generation of aerospace vehicles." The focus of these technologies include: civilian and commercial aerospace applications, supersonic and hypersonic propulsion research as well as the newly emerging commercial space field.

For the second consecutive year, JASC had a booth amongst some of the propulsion industry's giants that also attended the conference, including UTC (with both their Pratt & Whitney and Hamilton-Sundstrand divisions), GE Aviation, Rolls-Royce and Aerojet.

JASC's booth this year proudly displayed some of our more technologically innovative design solutions. These included: our Bi-Propellant Thrust Control Valve (a cryogenic, turbo-pump throttling valve for a commercial space application), our Thrust Vector Control and Fin Control System actuators (also for commercial space applications), as well as an example of our Electronic Pressure Regulator and Hot Gas Valve (*the* fuel metering valve for the X-51A SED/Waverider hypersonic scramjet research vehicle, currently scheduled to fly in the first half of 2009).

Not only did JASC have a booth at this year's conference, but JASC is also proud to commend two of our engineers who presented papers. JASC's engineering manager, John Calleja, presented a paper on the development of our innovative Electronic Pressure Regulator. As mentioned above, this device is used on the X-51A SED/Waverider hypersonic scramjet research vehicle, its function is to control (to a very high degree of accuracy) the pressure of the gaseous nitrogen inside the vehicle's fuel tank. John's presentation was well received and sparked quite a bit of interest by those who attended.

JASC Controls Engineer, Matt Caspermeyer, presented his paper on the modeling and analysis of a high-temperature, pneumatic actuator. Matt's modeling was used to verify the intended performance of a pneumatic actuator designed to control the Inlet Guide

Vanes and First Stage Stator of a technology demonstrator turbine engine. Through Matt's excellent analytical and modeling skills, he was able to identify a performance deficiency before any hardware was machined. This allowed a redesign of a critical section within the actuator, resulting in a complete actuator system (control valve, pneumatic actuator and digital electronic controller) that worked the first time it was tested. Matt's presentation was well attended and also piqued quite a bit of interest.

If you have any questions, or would like to know more about any of the items mentioned above (or any other innovative JASC designs) please visit our website:
www.jasc-controls.com

If you're ever in the Phoenix area, please stop by and visit our facility.