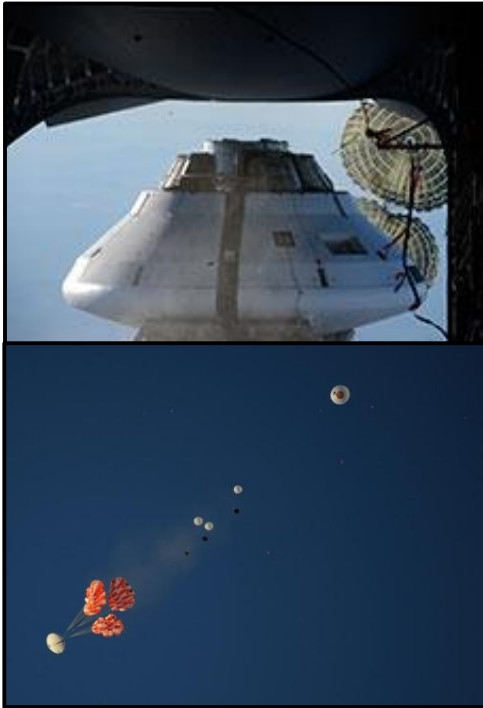




Modeling & Testing Of The Capsule Parachute Assembly System (CPAS)



**Mrs. Leah Romero
ESCG/JACOBS**

Mrs. Leah M. Romero entered the aerospace engineering field in 2009 after receiving a Bachelors of Science degree in Aerospace Engineering and a Business Certificate from the University of Texas at Austin. She began her career as a Systems Engineer for the Orion Flight Crew Equipment (FCE) team where she oversaw the design of crew sleeping bags, hygiene system, hand holds, and other hardware. In the fall of 2010, she joined the Capsule Parachute Assembly System (CPAS) analysis team. The Capsule Parachute Assembly System (CPAS) for the Multi-Purpose Crew Vehicle (MPCV) "Orion" spacecraft is engaged in a multi-year design and test campaign to qualify a parachute recovery system for human use on the Orion Spacecraft. Test and simulation techniques have evolved concurrently to keep up with the demands of a complex system.

Within six months of joining the CPAS team, Mrs. Romero had co-authored several papers brought to the 21st AIAA Aerodynamic Decelerator Systems (ADS) conference under her maiden name, Olson. The papers included topics concerning parachute inflation asymmetry, verification and validation of human rated parachute systems, and two summary papers discussing CPAS analysis and testing techniques. Since joining CPAS Mrs. Romero has participated in 10 CPAS drop tests as the lead analyst on the load train predictions which determine margins of safety for test support equipment. She is also the team lead for implementing the Flight Analysis and Simulation Tool (FAST) and is currently co-authoring a paper discussing the cutting edge statistical methods CPAS uses to define the parachute model for the 2013 AIAA Aerodynamic Decelerator Systems (ADS) conference. Mrs. Romero brings her knowledge and experience with CPAS to share with AIAA Houston on the evening of Feb 21st in the Alamo Ballroom at the Gilruth Center and we hope to see you there.

Gilruth Center – The Alamo Ballroom

5:30pm Thursday, Feb. 21st, 2013

AIAA Members, Prospective Members, and their Guests are Welcome.

Please make dinner reservations online at www.aiaahouston.org

Dinner Selections: Chicken Parmesan or Cheese Tortellini

Members (and Spouses): \$10 - Non-Members: \$15 - Full Time Students \$10

PLEASE SPECIFY ANY SPECIAL MENU NEEDS.

Contact: Michael Martin - michael.w.martin-1@nasa.gov - 979-220-5517

NOTE: Dinner reservations should be made as soon as possible as there are only a set number of dinners available.

ANY CANCELLATIONS ARE REQUIRED PRIOR TO THE DEADLINE. NO SHOWS WILL BE BILLED