

AIAA Aerodynamic Decelerator Systems (ADS) Technology session provides the world's leading scientists, engineers, researchers, and managers, and promising students within the field of parachute and aerodynamic decelerator systems an opportunity to present recent advances before a knowledgeable international audience. Topics include, but are not limited to, the following:

- **Modeling and Simulation:** Advances in applied computational fluid dynamics (CFD) methodology, applications, and techniques; flexible structural modeling techniques; progress in fluid structure interaction (FSI) modeling; studies combining experimental, analytical and/or numerical techniques; CFD/FSI verification and validation; atmospheric modeling; and prediction techniques.
- **System Applications and Operations:** Decelerator systems for personnel, cargo, aircraft escape, spacecraft reentry, ordnance retardation, and unmanned aerial vehicles; logistics; environmental effects that affect system life cycle, aging, damage, maintenance, and repair; life-cycle extension programs; system studies; definition of new decelerator applications; visual training simulations and training; airdrop/aerial delivery planning methods; and wind field and environmental data processing techniques.
- **Testing:** Ground and flight testing of systems and components; instrumentation; advanced data acquisition techniques; data processing methods; low-cost airborne measurement methods to estimate trajectory and dynamics; miniaturized sensor technologies; remote sensing technologies; in-flight measurement techniques used at ground test facilities; and atmospheric measurement techniques.
- **Materials and Manufacturing:** New materials; weaving; material forming methods; sewing; bonding; fabrication methods; automation and inspection techniques; quality assurance; statistical process control; production cost reduction processes; material specifications; and material science.
- **Design and Development:** Precision aerial delivery programs; development of ballistic parachutes, gliding parachutes, parachute clusters, paragliders, and inflatable structures; packing methods; deployment and extraction systems; reefing and staging methods; parachute system components and hardware, including attachment structures, release and dis-reef devices, mortar systems, ejection seats, composites, and airbags; updates on the development programs of aerodynamic decelerator systems, including new programs, completed programs, and lessons learned; and guidance and navigation development.
- **Other:** Decelerator system and components aerodynamics; structural analysis; drag characteristics and stability; scaling; flow field and wake characteristics; pressure distributions; databases, storage and retrieval; technology transfer; education; and historical aspects.