

51st Propulsion Meeting Held in Florida

Nearly 400 industry representatives attended the 51st JANNAF Propulsion Meeting (JPM), which was held from 18-21 November 2002 at the Hotel Royal Plaza on the Walt Disney World Resort in Lake Buena Vista, Florida. Considered to be one of the most robust programs in recent years, the 51st JPM featured 135 technical presentations and papers in 18 sessions. The program was fueled largely by current programs in hypersonic airbreathing propulsion system and technology development, Access-to-Space initiatives, and the Integrated High Payoff Rocket Propulsion Technology (IHRPT) initiative. Dr. Lawrence P. "Larry" Quinn, recently retired from the Air Force Research Laboratory's Propulsion Directorate at Edwards Air Force Base, California, served as Government Chair for the 51st JPM. Dr. Quinn now works for propulsion contractor Aerojet in their Lancaster, California field office.

The Keynote Address for the 51st JPM was given by the Honorable Ronald M. Sega, the Pentagon's Director of Defense Research and Engineering (DDR&E). Dr. Sega, an Air Force veteran pilot, Air Force Reserve officer, astronaut, and mission specialist on Space Shuttle flights STS-60 and STS-76, currently serves as the chief technical advisor for the Secretary of Defense and the Under Secretary of Defense for Acquisition, Technology and Logistics. He also has management oversight for the Defense Advanced Research Projects Agency (DARPA).

In his address, Dr. Sega outlined a national approach to aerospace superiority through the recently crafted DoD/NASA National Aerospace Initiative (NAI). NAI is a cooperative, time-phased, goal-oriented Science and Technology (S&T) investment plan that supports the Pentagon's plans for operational transformation of the U.S. warfighter. NAI is comprised of three major elements: (1) airbreathing/hypersonic propulsion; (2) access to space; and (3) space technology. Of keen interest to the JANNAF group were Dr. Sega's remarks on plans for investment in propulsion related technologies, namely airbreathing/hypersonics and in a rocket-based two-stage to orbit (TSTO) vehicle, which will eventually lead to responsive, low-cost reusable launch vehicle systems by 2015.

The JPM technical program also included paper sessions on nozzles and control systems; gun propulsion systems; new and advanced propulsion concepts; liquid propellants and fuels; system analysis and modeling; tactical system development and demonstration; solid and gelled propellants; and in-space propulsion systems. On Wednesday, 20 November, attendees also had the opportunity to attend the 51st JPM reception in the hotel's Crown Point Courtyard. That same evening, a number of JANNAF participants also made the short trip over to Cape Canaveral to witness the successful maiden launch of Boeing's Delta IV Evolved Expendable Launch Vehicle (EELV).

Other technical meetings during the week included a forum on ground test environment definition for hypersonic airbreathing engines and a special workshop on test medium effects in high flight mach number testing of airbreathing engines. The conference closed on Thursday with a trio of specialist sessions organized by the Air Force Research Laboratory. These sessions provided the latest information on emerging materials and process developments for solid rocket propulsion systems, liquid rocket engines, and advanced high performance rocket propellants.

The 51st JPM proceedings, including the keynote charts and specialist session presentations, will be published in CD-ROM format later this month. For ordering information, contact CPIA at 410-992-7300 ext. 211 or 202. The 52nd JANNAF Propulsion meeting is tentatively scheduled for May 2004 in Las Vegas.

This review was published in the January 2002 issue of the CPIA Bulletin.