

***JANNAF PEDCS and SEPS Convene in Reno, Nevada
Including Specialist Sessions on Improvised Explosive Devices
and Lessons Learned in the Hazards Community***

The JANNAF 34th Propellant and Explosives Development and Characterization Subcommittee (PEDCS) and 23rd Safety and Environmental Protection Subcommittee (SEPS) joint meeting was held at the Circus Circus Hotel and Air National Guard 152nd Airlift Wing in Reno, Nevada, with attendance of 151. A total of 65 papers were presented in 15 technical sessions. PEDCS also presented a classified specialist session on improvised explosive devices (IEDs), which included seven technical presentations. SEPS also presented a specialist session on lessons learned in the hazards community, which included two technical presentations.



(Left to right) PEDCS Program Chair Mrs. Karrie J. Sandagger; Keynote Speaker Ms. Shannon Cunniff; and SEPS Program Chair Dr. David R. Mattie.

The PEDCS program consisted of 11 regular paper sessions, one specialist session, and seven subcommittee panel meetings. The papers that were presented covered topics associated with the areas of new propellant and explosive ingredients and formulations, propellants for guns and gas generators, reactivity and compatibility of liquid propellants, and propellant processing. The improvised explosive devices specialist session featured presentations from the Joint Improvised Explosive Device Defeat Organization (JIJEDDO) and the Army Research, Development and Engineering Center. Topics included the importance of planning and intelligence; technology for safe detection, neutralization and destruction of IEDs; and lessons learned from past IED incidents.

The SEPS program consisted of two regular paper sessions in which 15 technical papers were presented, one specialist session, and three panel meetings. Topics of these sessions included demilitarization, reclamation and reuse of energetic materials and munitions, occupational health, and toxicology. The specialist session on lessons learned in the hazards community featured presentations by contractor organizations on risk analysis of a reusable launch vehicle and hazard analysis of a space shuttle thermal protection system.

In addition to the above sessions, two joint PEDCS/SEPS sessions were conducted. The first of these was a keynote address, "Meeting DoD's Emerging Contaminant Challenges," by Ms. Shannon E. Cunniff, who is Director, Emerging Contaminants, Office of the Deputy Undersecretary of Defense for Installations and Environment. Ms. Cunniff discussed the work of the Materials of Emerging Regulatory Interest Team (MERIT), the process by which an emerging contaminant is identified and methods for dealing with it are developed, assessment of the impact of future restrictions on the use of a material, some examples of emerging contaminant monitoring, the importance of determining the true origins of an environmental contaminant, and the role of environmental management in assuring sustainability. Two other joint sessions, in which six technical papers were presented, addressed the topics of low-level detection of

energetic materials, “green” energetic materials, and protection from adverse environmental effects of energetics.

Panel meetings covered discussion of a great variety of possible topics for future workshops and specialist sessions. Topics included test methods for propellant surveillance and aging, variability in HTPB properties (including stability), propellants for space exploration vehicles, high-temperature properties of energetics as related to conditions of storage and usage in Iraq, effects of combining humidity and temperature aging, emerging environmental/safety/health (ESH) concerns regarding nanomaterials, design of “green” energetic materials, tutorial sessions for personnel new to the propulsion community, foreign developments in the field of energetics, DOE energetic material databases, standardization of liquid propellant test methods, reactive materials’ state of the art, and propulsion implications of space commercialization.

Other concerns and interests expressed during panel meetings included how to improve communication of ESH regulatory changes to the propulsion community, how to prioritize ESH concerns, how to promote the use of recycled energetic materials, development of an online spectroscopic database of energetics, getting the electronic version of CPIA Publication 394 online in order to facilitate updates, how to improve the manner in which liquid propellant compatibility data are presented and utilized, how to increase participation of explosives R&D personnel at JANNAF meetings, and the possibility of round-robin testing to better understand variability of HTPB and HTPE propellants. At least some of these are, or will ultimately become, panel tasks.

The unclassified proceedings of the PEDCS/SEPS meeting will be published as a CD-ROM. For ordering information, contact CPIAC Customer Service at 410-992-7305, ext. 212.

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