

**3rd NASA GRC Propulsion Control and Diagnostics (PCD) Workshop
February 28 - March 1, 2012, Cleveland, Ohio**

Draft Agenda

February 28, 2012

- 7:30-8:00 Registration
- 8:00-8:30 Welcome, Introductions, Agenda and Logistics - [Sanjay Garg](#) (GRC)
- 8:30-9:45 Overview of Government PCD Research
- 8:30-9:00 NASA Aeronautics Programs - [Sanjay Garg](#) (GRC)
- 9:00-9:30 Air Force VAATE and Technology Programs - [Al Behabhani](#) (AFRL)
- 9:30-9:45 Army AATE and Technology Programs - [Bert Smith](#) (AATD)
- 9:45-10:00 Break - Coffee Service
- 10:00-12:00 Session 1: Enhanced Engine Control
- 10:00 Overview - [Ten-Huei Guo](#)
- 10:10 C-MAPSS40k Overview and Update - [James Liu](#)
- 10:25 Fast Engine Response Research - [Ryan May](#)
- 10:45 Piloted Evaluation of Fast Engine Response Mode - [Jonathan Litt](#)
- 11:05 Engine Icing Effects Simulation and Detection - [Ryan May](#)
- 11:20 Integrated Flight Propulsion Control Applications - [James Urnes, SR.](#) (Boeing)
- 11:45 Discussion - All
- 12:00-1:30 Lunch & Plenary Speaker
- NASA Subsonic Fixed Wing Project – Bill Haller (GRC)
- 1:30-3:30 Session 2: Model-Based Control and Diagnostics
- 1:30 Overview - Don Simon
- 1:35 Model-Base Aircraft Engine Performance Estimation - [Don Simon](#)
- 2:00 Model-Based Diagnostic Architecture - [Jeff Armstrong](#)
- 2:25 Vehicle Integrated Propulsion Research - [Don Simon](#)
- 2:45 Model-Based Engine Control - [Joe Connolly](#)
- 3:15 Discussion - All
- 3:30-3:45 Break - Coffee Service with Snack
- 3:45-5:30 Session 3: Distributed Engine Control
- 3:45 Tools and Technology Development for Distributed Engine Control - [Dennis Culley](#)
- 4:05 Decentralized Engine Control System Simulator (DECSS) - Oran (Bud) Watts, (Rolls Royce LibertyWorks)
- 4:30 Working with High Temperature Electronics: Rediscovering a Lost Art - [Mike Krasowski](#)
- 4:55 Silicon Carbide Electronics Update and Outlook - [Glenn Beheim](#)
- 5:20 Discussion - All
- 5:30-7:30 Reception & Poster Session - Software and Industry/Academia Partners; Snacks with Soft Drinks, Cash Bar
- Aircraft Engine Controls and Diagnostics Technology Needs - [Grace Balut Ostrom](#) and [Gene Iverson](#) (Boeing)

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Draft Agenda (Continued)

February 29, 2012

- 8:00-10:00 Industry perspective on PCD Research
- 8:00 General Electric Aviation - [Bill Mailander](#)
 - 8:30 Pratt & Whitney - [Bruce Wood](#)
 - 9:00 Rolls Royce/Liberty Works - [Keith Calhoun](#)
 - 9:30 Honeywell - [Dewey Benson](#)
- 10:00-10:15 Break - Coffee Service
- 10:15-12:00 Session 4: Active Combustion Control
- 10:15 Overview - [John DeLaat](#)
 - 10:30 Low-Emissions Combustors Development and Testing - [Clarence Chang](#)
 - 10:50 Recent Combustion Control Test Results - [John DeLaat](#)
 - 11:10 Fuel Actuator Development and Testing - [Joe Saus](#)
 - 11:30 Sensors for Intelligent Engines - [Gary Hunter](#)
 - 11:50 Discussion - All
- 12:00-1:30 Lunch & Plenary Speaker
- Engine Monitoring and Control Technology Development at MTU - [Wolfgang Horn](#)
- 1:30-3:15 Session 5: High Speed Propulsion Modeling and Control
- Supersonics: Aero-Propulso-Servo-Elasticity
- 1:30 Overview - [George Kopasakis](#)
 - 1:40 Modeling of Concept Propulsion System - [George Kopasakis/ Joe Connolly](#)
- Hypersonics: Combined Cycle Engine (CCE) Mode Transition
- 2:25 Overview - [Tom Stueber](#)
 - 2:45 Hypersonic Propulsion System Simulation Development - [Jeff Csank](#)
 - 3:00 CCE Inlet Wind Tunnel Experiments - [Tom Stueber](#)
- 3:15-3:30 Break - Coffee Service with Snack
- 3:30-5:00 Review & Discussion - All

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March 01, 2012

- 8:00-10:00 [One-on-One Meetings with Task Leads](#)
- 10:00-10:20 Break - Coffee Service
- 10:20-12:00 [One-on-One Meetings with Task Leads](#) - Continued

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