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## EVENT RECAP

### “Accelerating Supply Chain Integration: Supplier Training Impacts in Real Time”

*A Half-Day “Smart Supplier” Forum and Buffet Luncheon  
for Aerospace Manufacturers, Suppliers and Training Providers  
Interested in Enhancing Supplier/Supply Chain Competitiveness*

**Thursday, November 9, 2006**

Renaissance LAX Hotel

**Most Forum presentations available for viewing online at the CSA website:**  
[www.CaliforniaSpaceAuthority.org/html/Wired](http://www.CaliforniaSpaceAuthority.org/html/Wired). Scroll down to “News”, then see  
“Presentations” under November 9<sup>th</sup>.

Over seventy participants representing key California Innovation Corridor (CIC) stakeholders from industry (prime and supply chain manufacturers), government, the military, and from training suppliers, including private, CSU and California Community College system providers, as well as state Workforce Investment Boards (WIBS) and economic development entities attended, all providing different perspectives and leverage points regarding supply chain transformation.

The Forum is part of an initiative to characterize the supply chain transformation, identify unique transformation-related training needs and resources and ultimately articulate a common set of learning outcomes across the supply chain training provider network. It is part of the California Space Authority (CSA) “Smart Supplier” initiative first conceived as part of the 2004 California Space Enterprise Strategic Plan and is being implemented as part of the California Innovation Corridor (CIC) “Workforce Innovation in Regional Economic Development (WIRED)” grant awarded CSA by the U.S. Department of Labor through the California Labor and Workforce Development Agency.

#### Key Agenda-Related Points Covered:

- Supply chain transformation is a complex adaptive system, creating co-dependencies, making knowledge sharing and a trust environment critical for successful transformation (*see Dozier, Davis below*)
- Mission assurance and reliability; adaptability to change; focus on values, with collaboration as important as competitiveness are key success factors for supply chain transformation. Understanding the global market,



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acceleration, adaptability through incremental change, e-centric operations, embracing of Six Sigma and Lean and staying in front of the transformation are critical to supply chain transformation success. A “vision of transformation” is needed (see *Adams, Heckrott, Davis and Weiner below*)

- Funds are available for supply chain transformation training, for in-house employees, as well as supply chain companies. (see *Lundberg, below*)
- While California’s labor pool of 17.8M is nearly as large as NY and FL combined, it is small compared to international competitors (see *Fall, below*)
- Increased industry relevance in today’s educational system, especially K-12, is critical. A balance between vocational and college preparatory efforts, with increased STEM rigor for both is necessary to supply an effective workforce for the 21<sup>st</sup> Century supply chain (see *Stewart, below*)

### **Welcome/Opening Remarks**

***Kellie Johnson***

***Co-Chair, California Space Authority Space Manufacturing Group***

***President/CEO, Ace Clearwater Enterprises***

Ms. Johnson, who serves on the Executive Board of the National Association of Manufacturers (NAM), described the importance of working together on supplier competitiveness, citing that NAM’s 2006 competitiveness study shows that costs of doing business in the U.S. are 31.7% higher (2006) for U.S. suppliers than those of its nine trading partners, a cost increase of 9% over 2003. Johnson described key NAM and National Manufacturing Council initiatives related to supplier competitiveness, training and education. As CSA’s Space Manufacturing Group Co-Chair, she discussed the CSA “Smart Supplier” initiative.

***The Honorable Andrea Seastrand, Executive Director, California Space Authority***

Ms. Seastrand shared information about the WIRED grant interface with Supply Chain issues, describing the manufacturing/supply chain projects which are part of the California Innovation Corridor WIRED initiative. *Presentation is available at link described above.*

***Jaime Fall, Assistant Secretary***

***California Labor and Workforce Development Agency***

Mr. Fall presented some recent State statistics from the Agency indicating that since 2003, the state has added more than 653,000 jobs. California now enjoys more than 15 million jobs, with new job revenue generating \$20 billion in increased revenue in three years, allowing for debt reduction and record investments in education, public safety and other services. Stating that the size of California’s labor pool 17.8M is nearly as large as New York’s and Florida’s combined, Mr. Fall emphasized that even California’s labor pool is small compared to its international competitors like China and India. Describing global competition and its demands on educational competitiveness, Mr. Fall also stressed the importance of the California Innovation Corridor WIRED initiative to the State and the overall WIRED initiative to the nation, emphasizing the State’s support of the projects in the CIC WIRED effort.

### **Supplier Transformation and Supply Chain Integration: Succeeding in Today’s Global Environment**



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***Sandra Adams, Director, Performance Excellence Director, Space and Airborne Systems, Raytheon***

Ms. Adams described the increasing complexity of today's supply chain transformation environment, mentioned that 31% of the SAS Strategic Systems suppliers are in California and shared a Raytheon supplier success story. Urging stakeholders to collaborate, not just compete, Ms. Adams cited three areas for successful supplier competitiveness: mission assurance, adaptability to change, focus on values, with details under each. *Presentation is available at link described above.*

**California Manufacturers and Technology Association Update**

***Jack Stewart, President/CEO, California Manufacturers and Technology Assn.***

Mr. Stewart reiterated the high cost of doing business in the U.S., citing California's costs as even greater and described what CMTA is doing to address these issues. He emphasized the importance of re-inserting relevance in today's educational system, especially K-12 system, citing a Gates study of drop-outs revealing that 81% saw no relevance between high school and the real world. Average pay for manufacturing jobs in California is \$56,000/year, with \$30,000/year the average for other jobs, including four-year degreed jobs, but 75% of students see manufacturing as low-wage occupation. CMTA is committed to an aggressive education agenda for the upcoming year and is looking for partners/supporters in this effort. Get REAL (Relevance in Education and Learning) is CMTA's initiative meant to re-insert industry relevance in today's education, especially K-12.

**Supply Chain Transformation Impact on Suppliers and Procurement**

***Charles Heckrotte, Director Material, Northrop Grumman Space Systems***

Mr. Heckrotte cited a half dozen key areas of focus for those seeking success in the era of supply chain transformation: Reality of a Global Marketplace; Understanding of the Need for Speed; Incremental Change as a path of choice; demand for E-Centric perspective; embracing of 6 Sigma and Lean; need for Getting Ahead of the Curve. *Presentation is available at link described above.*

**SMC Update: Space Supply Chain and Industrial Base Issues**

***David Davis, Chief, Systems Engineering Division, SMC/EAE***

Stating that SMC is emphasizing a renewed focus on mission success as a priority, Mr. Davis acknowledged that the technology is getting more complex at all levels – hardware, software and the interfaces between them. SMC is addressing the issue of standards, rewriting many of its standards, implementing new specs and standards since 2002. Industrial base issues of concern to SMC: reliable sources of supply for space systems, limited supply base for numerous components, financial stability of sub-tier supply base, increased unit cost due to limited production base, technology limitations: limited company IR&D, limited company "lean" enhancement initiatives and limited capital investment in technology/production. Mr. Davis also presented the briefing Mr. Schipper of The Aerospace Corporation had prepared describing the corporation's Supplier Quality Initiative of the Space Quality Improvement Council, or SQIC Both presentations are available at link described above.

**Characterizing the Nature of the Supplier Transformation**

***Ken Dozier, Executive Director, Western Research Applications Center, Viterbi School of Engineering, University of Southern California***

Pointing out that we live in and the supply chain transformation is all about a complex, adaptive system, Mr. Dozier reminded the audience that complexity increases with acceleration. In a supply chain, disruptions due to increasing complexity in a changing environment create a state of co-dependency. Knowledge-sharing between members of the supply chain support stability, with grid computing and creation of a trust



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environment critical to development of “super supply chains”. *Presentation is available at link described above*

**Terry Weiner, Senior Consultant, Aerospace & Defense Group, California Manufacturing Technology Consulting (CMTC)**

Mr. Weiner began by advising the audience that only one in five lean initiatives for is successful, emphasizing the importance of a roadmap for transformation success. Describing a process taking an organization from vision to the support of mature work groups, Mr. Weiner outlined the process a supplier might take in transforming the organization. *Presentation is available at link described above*

**Panel – Training Resources for the “Smart Supplier”**

Panel members described their programs and services, emphasizing those with interfaces to or opportunities for the supply chain.

**Michael Curran, Director, NOVA (Santa Clara) Valley Workforce Investment Board**  
[www.novaworks.org](http://www.novaworks.org)

**Roz Samia, Consultant, California Manufacturing Technology Consulting (CMTC)**  
*Presentation is available at link described above*

**Les Uhazy, Dean, Mathematics/Science, Antelope Valley College**  
[www.avc.edu](http://www.avc.edu)

**John Means, Dean, Community Advancement, El Camino College**  
[www.elcamino.edu](http://www.elcamino.edu)

**Funding Opportunities for Supplier Training**

*Charles Lundberg, Economic Development Director, Employment Training Panel State of California*

Mr. Lundberg gave an overview of the Employment Training Panel and described its Small Business Program, Entrepreneurial Skills Training and special employment training programs.

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**Attendees of Forum**

Attached Excel file

**Next Steps**

- Supply Chain Industry Advisory Group meeting (TBA, first quarter 2007)
- Space Manufacturing Group meeting (TBA, first quarter, 2007)
- Supply chain survey regarding transformation/training needs (first quarter, 2007)



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