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The Puget Sound Chapter of AESS presents
***More 'electric' airplanes and the
role of Power Electronics***

Dr Karimi Kamiar—Boeing.

6pm (light refreshments) for 6:30-7:30pm, Wednesday, March 26, 2008
(venue details over)

The 787 has a 'More-Electric Architecture' for airplane energy management yielding gains in efficiency. Most functions of the traditional bleed system have been electrified, including brakes, Environmental Control System, Ice Protection, and Engine Starting. While this architecture is more efficient than the traditional bleed air, it requires more electrical power than a conventional bleed air system and more use of power electronics equipment such as large inverters and transformers.



<http://www.aircraftspotting.net/images/787-8.jpg>

This presentation will provide a high level overview of the 787 airplane power systems, and describe the role of power electronics in this system. The areas of power electronics and system integration research including component and system simulation (of significant importance to the more-electric aerospace systems) will also be covered.

To attend, **please RSVP no later than 25 March 2008** to Reece Lumsden at reece.h.lumsden@boeing.com

Speaker Bio: Dr Kamiar received his B.S., Master of Engineering, and PhD. degrees in Electrical Engineering from Cornell University in 1981, 1982, and 1986 respectively. From 1986-89 he worked for Landis and Gyr Systems in San Jose, CA, in charge of performing Energy Management Systems research. Since 1989 he has been with The Boeing Company, being the lead of system analysis and modeling for the Space Station Power System, from 1989-1992. Since 1992, he has worked on power system design, power electronics research, power quality issues, and simulation of various commercial airplane power systems including 747/767/777 power systems. He currently leads multiple research projects in the areas of Power Conversion Technology, Architecture Optimization, and System Simulation, as well as leading Power Quality, Testing and Simulation of the 787 power systems.



