



Newsletter

Volume 34, Number 9/10, May/June 2004

The Technology behind the Personal Courage

A Preview of the Personal Courage Wing at the Museum of Flight

Speaker: Scott Eberhardt
University of Washington

Why does Snoopy wear a white scarf? Who was “legless” Douglas Bader? How did the Camel (Sopwith that is) get its hump? Which WWII fighter airplane was produced in the largest numbers? Where did fighter tactics develop? Spend a day in the new Personal Courage Wing of the Museum of Flight and you can learn the answers to these and other questions.

The Museum of Flight’s new Personal Courage Wing contains one of the finest collections of WWI and WWII fighter aircraft in world, in a new 88,000 square foot expansion. The exhibit will feature the people who designed, built and flew these airplanes. At the June AIAA PNW Chapter dinner meeting you will get a preview of the exhibit and will hear some of the great stories that space wouldn’t allow in the exhibit.

Scott Eberhardt, Associate Professor of Aeronautics and Astronautics, was a consultant with the Museum of Flight, assisting researchers and writers in finding and documenting personal courage stories. As an aviation history buff and engineer, Prof. Eberhardt began researching the engineering changes that occurred during WWI and WWII. The dinner talk will focus on these



engineering changes and the historical context in which they were developed.

Joint AIAA/SFTE Lecture - Dinner Meeting

Date: **Tuesday, June 8, 2004**
Place: Old Spaghetti Factory 2801 Elliott Ave, Seattle, WA 98121
Time: 6:00 PM Social, No-Host Bar
6:30 PM Dinner – (lasagna or chicken Caesar salad)
7:00 PM Program – “The Technology Behind Personal Courage” Call Dave Paisley anytime 425-717-5691
or send email to david.j.paisley@boeing.com
or Paul Clement paul.l.clement@boeing.com

Please make reservations by June 4th

Entrée choices are lasagna and chicken Caesar salad. Please specify choice when reserving.

Dinner Price:

\$15 AIAA/SFTE Members and Guests

\$18 Non-Members

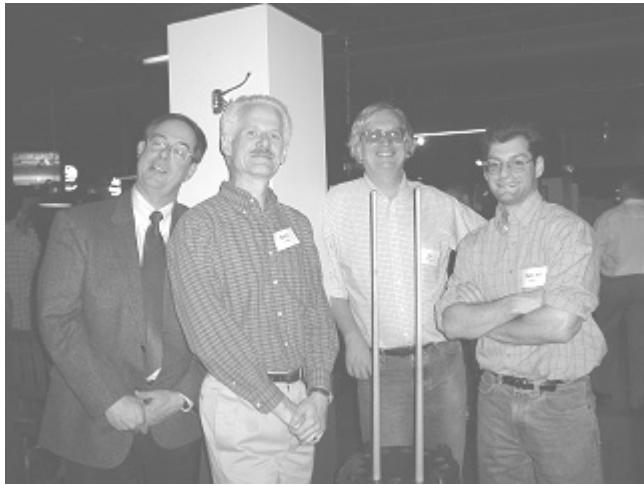
\$5 Students and Educator Associates

Program Only: **\$5** (Free for persons 17 and under)

A reservation is a commitment to pay!

2004 PNW Young Members Event –Pool Night at Jillian’s Emmanuel Domingo

This year’s annual Pool Evening was held April 4th, 2004, at Jillian's in Seattle, WA. Sponsored by the Young Professionals Committee of the Pacific Northwest Section, the informal atmosphere was used to promote networking among the section's members. More than 50 people were in attendance, including four past section chairs and two Boeing Commercial directors. Over half of the attendees were



students from the University of Washington's Aeronautics/ Astronautics department. Companies represented included AMI, Andrews Space, Boeing, and Tethers Unlimited, Inc.

The pool tournament, organized by Dave Paisley, kept the evening flowing. With more than 30 participants time ran out before a two-person team could be declared the champions. Those that ended their billiard's dreams early were able to find other tables to work on their skills while snacking on pizza and buffalo wings.

Be sure to join us next year for this growing event!



PNW Aerospace Timeline

Dinner Meeting and Lecture

June 8, 2004 Dinner Meeting

Topic: Technology Behind Personal Courage
Date/Time: Tuesday, June 8th at 6:00 p.m.
Location: The Old Spaghetti Factory, 2801 Elliott Ave, Seattle

Retired Members Brunch

May 15th

Speaker: Blended wing body with Rudy Hillinga
Date/Time: May 15th, 9:00AM
Location: Museum of Flight, Seattle
Contact: Tom Holgate 253-838-0333

The Royal Aeronautical Society - Seattle Branch



Lecture at the Museum of Flight, 6:00 p.m., Tuesday, 18 May 2004 to be given by

Mr. Thomas J. Cogan

Chief Project Engineer for the Boeing 7E7

"Boeing 7E7 Dreamliner: An Industry's Journey to Value"

The Boeing 7E7 Dreamliner will bring the best technology in the aerospace industry together in an airplane that will provide new efficiencies to the airlines of the world. From the tools used to design the airplane to the materials it is made from, Boeing is improving everything about airplanes all with an eye toward value for passengers, airlines and everyone associated with the program. The presentation will focus on recent progress on the program and the challenges ahead.

Portland AIAA Technical Conference

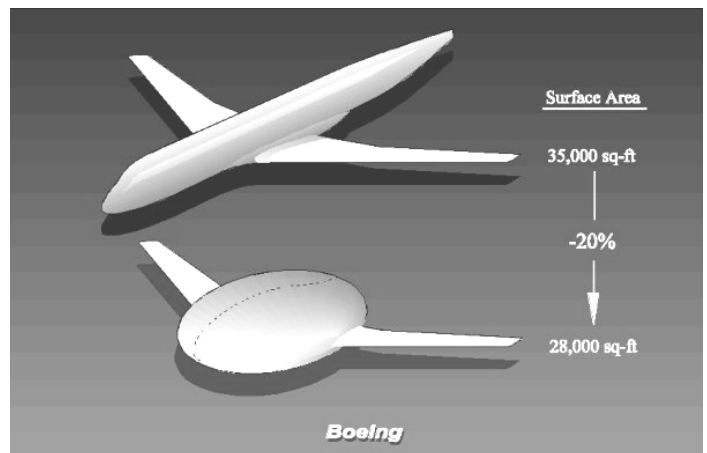
An AIAA conference is to be hosted in Portland from 28 June to 1 July. This conference includes Technical committees from Aerodynamic Measurement Technology/Ground Testing; Fluid Dynamics; Flow Control; Plasmadynamics and Lasers; and Thermophysics. Details of the Portland conferences can be found at the website:

<http://www.aiaa.org/calendar/index.htm?cal=5&luMeetingid=979>

PNW Section members can register for the block rate, which includes admittance to sessions and exhibits for \$295. The block rate excludes copies of loose papers, after-meeting CD-ROM, food functions, and social activities, but these can be purchased separately. The block rate is valid through mid-June and cannot be purchased online. To apply for block-rate, download the form <http://www.aiaa.org/images/pdf/Fluids04reg.pdf>, complete, and fax to the number specified. On the bottom right corner beside the Total Due field, write the words "Pacific Northwest Section" to receive the block rate. To visit the exhibits, check in at the registration desk to be issued a credential. There is no exhibit admission fee. Contact Rachel Sixmo at 703 264-7577 (EST) or rachels@aiaa.org with any questions.

Retiree Brunch Presents: The Blended Wing Body Transport Aircraft With Rudy Hillinga, retired, The Boeing Company May 15th Museum of Flight 9:00 – 11:00 a.m.

The BWB (Blended Wing Body) is a new concept in aircraft design which offers great potential to substantially reduce both manufacturing and acquisition costs while improving aircraft performance and flexibility for both passenger and cargo missions. The blended wing body program started as a small NASA contract to explore revolutionary aircraft configurations. The inset sketch illustrates the train of thought that led engineers to the BWB configuration. Initially, designers were concerned about the concept of a square pressure vessel. Concepts that had several cylindrical bays linked side by side were looked at to solve this problem. As these aircraft were optimized for weight they began evolving into conventional airliners. The resulting aircraft had such performance improvements and structural efficiencies in the wings that it overwhelmed the weight penalty of the square fuselage. The aerodynamicists have learned how to trim an aircraft with effectively no drag penalty. The propulsion integration has abandoned the boundary layer ingestion. Payloads has come up with viable, certifiable egress schemes. The aircraft is evolving into a real airliner.



Section website: http://www.geocities.com/aiaa_2000/index.html
 National website: <http://www.aiaa.org>

Please submit newsletter materials to the editor by the 27th of August for the September Newsletter.

Outstanding Section Awards	Membership Award
1972-1973	1997-1998
1977-1978	Young Member
1978-1979	Activity Awards
1991-1992	1990-1991
1993-1994	1991-1992
1994-1995	1994-1995
	1995-1996
Section Special Event Awards	Career Enhancement Award
1976-1977	1997-1998
1977-1987	Newsletter Awards
1978-1979	1994-1995
1982-1983	1995-1996
1987-1988	1996-1997

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 (Join/Renew/Update). Membership ID needed

Section Officers and Directors

Position	Name	Address (Mail stop if Boeing*)	Phone	Email address
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Chairman	Vera Martinovich	02-XJ	425-266-8664	vera.a.martinovich@boeing.com
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Secretary	Joe Dortwegt	03-52	425-294-0054	joseph.dortwegt@boeing.com
Treasurer	Paul Moorehead	67-65	425-237-5176	paul.j.moorehead@boeing.com
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Advisory Council	Scott Eberhardt	P.O. Box 352400, UW, Seattle, WA 98195	206-543-6508	scott@aa.washington.edu
Past Chairman	Laura Kistler	02-KW	425-294-8520	laura.s.kistler@boeing.com
Elected, non-voting				
Vice-Chairman-Elect	Dave Lednicer	2133 152nd Ave NE/Redmond, WA 98052	206/746-1299	dave@amiwest.com
Secretary-Elect	Jon Lee	5108 71st Way NE, Olympia, WA 98516	206-934-9782	drwatson@u.washington.edu
Treasurer-Elect	Eric Lund	505 5 th Ave. S., Suite 300, Seattle, WA 98104	206-438-0612	elund@andrews-space.com
Appointed				
Webmaster	Jane Kuta	8A-94	253-773-5759	jane.f.kuta@boeing.com
Honors & Awards	Scott Eberhardt	P.O. Box 352400, UW, Seattle, WA 98195	206-543-6508	scott@aa.washington.edu
Retired Members	Tom Holgate	2704 SW 314th, Federal Way, WA 98023-7842	253-838-0333	holgatz@aol.com
Newsletter	Open			
Nominations	Laura Kistler	02-KW	425-294-8520	laura.s.kistler@boeing.com
Evolution Of Flight	Ben Sarao	1432 242 nd Place SE, Sammamish, WA. 98075	206-768-7166	bmsarao@hotmail.com
Museum of Flight Liaison	Open			
Pre-College Outreach	Scott Eberhardt	P.O. Box 352400, UW, Seattle, WA 98195	206-543-6508	scott@aa.washington.edu
Public Policy	Karl D'Ambrosio	5026 18 th Avenue NE, Seattle, WA 98105	253-395-3710	karld@emfcowa.com
Young Professionals	Emmanuel Domingo	2779 NE Liberty, Gresham, OR 97030	206 227-7819	E_domingo@hotmail.com

* All Boeing people have the address of P.O. Box 3707, Mail Code xx-xx, Seattle, WA 98124-2207



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