



Newsletter

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Fly-By-Wire Development at Boeing Commercial Airplanes

Robert Blegg

FBW – Fly-by-wire - flight control systems are now taken as the norm for commercial jet transports. This is a fairly recent departure from the long established mechanical signaling practice employed for the first and second generation of such airplanes. The FBW system key enablers, Boeing philosophy and, system architecture, function and benefits are discussed.

Bob developed a great love for aviation and airplanes as a young man and has spent much of his life living out his boyhood dreams. He obtained degrees in Aeronautical Engineering (Notre Dame 1962) and Automatic Controls (U of California 1964). After graduation he took employment with Boeing Commercial Airplanes and has remained with them his entire professional career.

Most of his first thirteen years was involved with research and development – on various projects including airplane handling qualities and automatic landing -- most enjoyably on the 367-80 and NASA 515 aircraft. Subsequently, he “graduated” to production related work and became group leader for the development of the first autoland capable autopilot for the 737 airplane (1979 through 1984).

Since 1985 Bob has been almost exclusively associated with the design of FBW (Fly-by-Wire) primary flight controls. His first assignment was group leader for the development of the Primary Flight Computer --- working with suppliers here and in the UK. Next was the generation of the FBW control laws employed on the 777 airplane. More recently, Bob led the flight controls related product development team that defined the initial 787

flight control system and continues to support that program to the present day.

In private life, Bob has indulged his love of airplanes by rebuilding and flying North American P-51 Mustangs over a twenty year period.



May 21st
23rd Anniversary
Retiree Brunch
9:00 – 11:00 a.m.
Museum of Flight

Contact Tom Holgate 253-838-0333 for details. Breakfasts ordered based on number of reservations – let Tom know if you are attending (holgatz@aol.com)

Joint AIAA/SFTE Lecture - Dinner Meeting

Date: **Tuesday May 17, 2005**
Place: Old Spaghetti Factory 2801 Elliott Ave, Seattle, WA 98121
Time: 6:00 PM Social, No-Host Bar
6:30 PM Dinner (lasagna, spaghetti, or chicken Caesar salad)
7:00 PM Program
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)

Please Note: New Signup Options via our new website

AIAA Sign up online at <http://www.pnwaiaa.org> -> reservations
Or send email to reservations@pnwaiaa.org (including meal choice)
You will receive a confirmation e-mail.
Or call **David Lednicer** at (425) 643-9090
SFTE Mike Bartlett – michael.f.bartlett@boeing.com
Please make reservations by Friday, May 13
A reservation is a commitment to pay

Section website: <http://www.pnwaiaa.org/>
 National website: <http://www.aiaa.org>

Please submit newsletter materials to the editor by the 20th of May for the June 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
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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Treasurer-Elect				
Appointed				
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