## **AIAA Distinguished Speaker**





## **Inventing the Joint Strike Fighter**

By Dr Paul Bevilaqua, former Chief Engineer of Skunk Works

## **AIAA National Lecture Tour - Melbourne**

Monday 12<sup>th</sup> May at 7:00pm (Doors open at 6:45pm)
Room 80.04.11, RMIT Swanston Academic Building,
80/445 Swanston St, Melbourne
This event is FREE, but **RSVPs are essential** via
<a href="http://www.dlp2014-melbourne.eventbrite.com.au">http://www.dlp2014-melbourne.eventbrite.com.au</a>
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Dr Bevilaqua will discuss how the Joint Strike Fighter (JSF) has been developed to meet the multi-service, multi-role fighter requirements of air forces around the world. Three JSF variants have been designed, including one with an innovative propulsion system that can be switched from a turbofan cycle to a turbo shaft cycle for vertical takeoff and landing. This propulsion system enabled the X-35 to become the first aircraft in history to fly at supersonic speeds, hover, and land vertically. This presentation will describe the technical and program challenges involved in developing the JSF and will show how an innovative idea became an international program involving engineers from half a dozen countries.

Dr Paul Bevilaqua joined Lockheed Martin as Chief Aeronautical Scientist and became Chief Engineer of Skunk Works, where he played a leading role in creating the JSF. He invented the dual cycle propulsion system that made it possible to build a stealthy supersonic vertical/short take-off and landing fighter aircraft, and subsequently led the engineering team that demonstrated the feasibility of this aircraft. Prior to joining Lockheed Martin, he was Manager of Advanced Programs at Rockwell International's Navy aircraft plant. He began his career as a United States Air Force officer at Wright Patterson AFB. He received degrees in Aeronautical Engineering from the University of Notre Dame and Purdue University. He is a Fellow of the American Institute of Aeronautics and Astronautics (AIAA) and a member of the National Academy of Engineering. He is also the recipient of a USAF Scientific Achievement Award, AIAA and SAE Aircraft Design Awards, AIAA and AHS VSTOL Awards, and Lockheed Martin AeroStar and Nova Awards.

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