

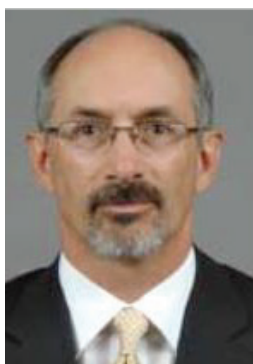
**TRACK 4: ADVANCED ENGINEERING TOPICS****“ADVANCES IN THE PILOT LIFE SUPPORT SYSTEM”**

BY  
MR STEVEN PEAKE  
COBHAM MISSION SYSTEMS

---

**ABSTRACT**

Cobham is the world leader in design and supply of best-in-class pilot life support systems for global military aviation trainer, jet fighter and specialty aircraft platforms. With 40 plus years of experience in aviation oxygen system and onboard oxygen generation systems installed on over 6000 aircraft, Cobham has leveraged field information and technology enhancements to advance pilot life support systems (LSS). By focusing on the pilot and performance of the complete dynamic “motor to mask” system, system and component technical enhancements are continually being improved. The oxygen generator is the heart of the pilot LSS. With the recent introduction of the most advanced version of pressure swing adsorption (PSA) technology, Cobham’s SureSTREAM™ oxygen concentrator offers improved stability of oxygen concentration, sensors, data storage/communications capabilities and enhanced maintenance capabilities to meet increasing performance demands and under an array of dynamic flight conditions. This discussion will review the SureSTREAM™ technology developments and Cobham’s continued technology developments for a fully integrated pilot life support systems.

**BIOGRAPHY OF SPEAKER**

Mr Peake has a BS in Electrical Engineering from Iowa State University and has led system architecture, design and delivery of complex systems for over 30 years. He holds more than 20 US patents covering research equipment, medical devices and aircraft life support systems and currently holds the title of Chief Engineer.