SAE 2015 AVIATION TECHNOLOGY FORUM
航空技术论坛

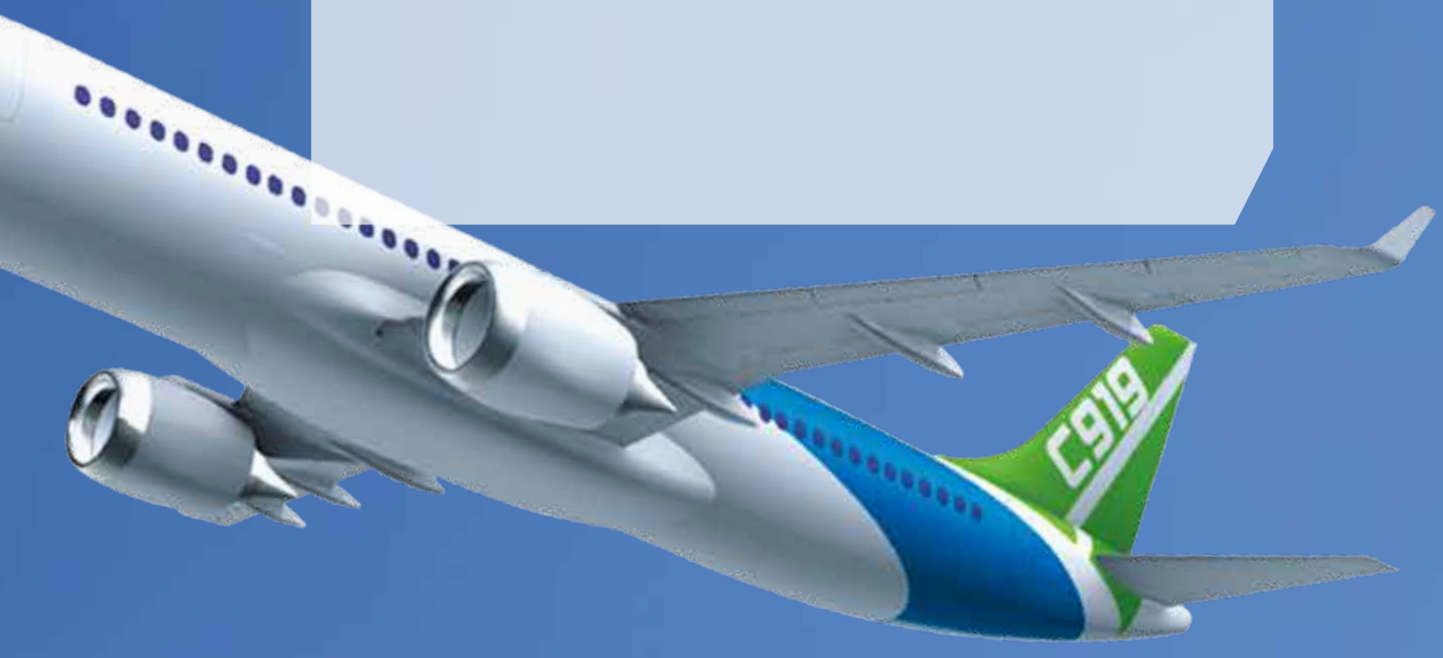
JUNE 9-10, 2015
Shanghai China
www.saeatf.org

HOSTS INTRODUCTION

The Commercial Aircraft Corporation of China, Ltd. (COMAC) is a stateowned company, which is formed with the approval of the State Council and jointly invested by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council, Shanghai Guosheng (Group) Co., Ltd., Aviation Industry Corporation of China (AVIC), China Aluminum Corporation (CHINALCO), Baosteel Group, and Sinochem Group. COMAC functions as the main vehicle in implementing large passenger aircraft programs in China. It is also mandated with the overall planning of developing trunk liner and regional jet programs and realizing the industrialization of civil aircraft in China. COMAC is engaged in the research, manufacture and flight tests of civil aircraft and related businesses such as marketing, servicing, leasing and operations of civil aircraft. The company has six member organizations: COMAC Commercial Aircraft Co., Ltd. (ACAC), Shanghai Aircraft Design and Research Institute (SADRI), Shanghai Aircraft Manufacturing Co., Ltd. (SAMC), Shanghai Aircraft Customer Service Co., Ltd., Beijing Civil Aircraft Technology Research Center (BCATRC), and Shanghai Aviation Industrial (Group) Co., Ltd. (SAIGC).

SAE International is a global technical association of more than 145,000 engineers and related technical experts in the aerospace, automotive and commercial-vehicle industries. It was founded in 1905 with 30 engineers in New York and now spans more than 100 countries. SAE International is perhaps best known for its technical standards. More than 8,000 technical experts from around the world participate on 600 standards committees to develop a large base of standards and recommended practices that are used to support product design and development. Many government regulations and documents reference SAE International standards.

Contents



OVERVIEW

The SAE International Aviation Forum will provide an open technical forum for engineers in aircraft design, aircraft engine design/integration, aircraft system/component suppliers, aviation authorities, aircraft design consultants and aircraft maintainers/sustainers, to get an overview of aircraft design processes from beginning to end, including modeling and simulation, safety assessment, electronics design, system integration and the challenges of aircraft design.

This event will provide technical insights into the process of aircraft design and provides practical knowledge for implementation throughout the design lifecycle. This event will give participants insights into how global manufacturers approach the design and support of leading-edge aircraft and propulsion. The practical knowledge for managing the design from concept to production, and real-world knowledge on how the aircraft design, integration, and testing process is managed.

The event is organized by engineers and leaders of global manufacturers and component suppliers, including the leading airframe manufacturers and engine providers.

Highlights:

- Get the latest information on industry happenings and products
- Learn about OEM leadership strategies
- Share experiences and potential solutions with other participants
- Network and interact with individuals and supplier companies, on a global scale, Interact with the future leaders

Benefits of Exhibiting

- Showcase your organization's innovation and new technologies to a global audience
- Attendee networking functions
- Opportunity for high visibility sponsorships
- Company listing and description in Event Guide distributed to all event attendees
- Decision-makers, engineers and technology experts will attend in search of solutions like those that your company stands ready to provide.
- Your products will be positioned as some of the most innovative in the aerospace industry.
- Your high-impact display will maximize your marketing dollars to influential aerospace industry professionals

FORUM AGENDA

Tuesday, June 9	
Forum Opening and Welcome	
9:00-9:30	**Gary Schkade,** *SAE International, General Manager, China COMAC*
Forecasting the China Aerospace Market	
9:30-11:00	Leaders from global aircraft manufacturers will provide their insight into the industry, and their outlook on what the future holds for the global aerospace markets. **Yang YANG,** *Director of Marketing Research Center, COMAC* **David Prevor,** *Head of Market Research and Forecast, Airbus Helicopters*
Challenges / Opportunities in Aircraft Development	
11:30-12:30	As power technologies continue to advance, the concept of the more-electric airplane becomes more achievable. The Boeing 787 and Airbus A380 have electric power requirements that rival small cities, and the technologies that have been advanced from these designs make all electric airplanes possible. **Henry Claeys,** *Senior Technology Fellow, Honeywell* **Kathy KANG,** *Director of More Electric System Department, COMAC BASTRI*
Lessons Learned from ARJ21 to C919 / C929	
13:30-15:00	The Civil Aviation Administration of China (CAAC) issued a type certificate on December 30 2014 for the COMAC ARJ21-700 regional jet, China's first domestically produced airliner. The program has been more than 12 years in development and started the certification effort in 2002. This session will explore the lessons learned, and what plans are in place for the C919 and C929. **Yao LU,** *Director of Aircraft Airworthiness Institute, CAAC* **Yong CHEN,** *General Design of ARJ-21, COMAC* **Qin (Amy) ZHU,** *Systems Certification & Airworthiness Engineer, Aviage Systems*
Aerospace Materials – Alloys & Composites	
15:30-17:00	This session will focus on the latest technology developments in materials used for aerospace design, from structures to skin, to include new alloys and composites. **Murray Scott,** *Managing Director, Advanced Composite Structures Australia Pty Ltd.* **Dongsheng LI,** *Deputy Dean, Shanghai Aircraft Design and Research Institute, COMAC* **Weidong HUANG,** *Director, The State Key Laboratory of Solidification Processing, Northwestern Polytechnical University, China* **Martin MA,** *Executive Director of ETA-China, Engineering Technology Associates (China), Inc.*
Closing Panel: TSO Status Harmonization of standards between US & China	
17:00-18:00	This panel will highlight where problems occur during the design process and provide insight into how to prevent design issues before they affect the overall process. It will focus on the use of global standards and their application. *Moderator:* **Eric Peterson,** *Vice-chairman of SAE International S-18 Committee, Electron II* *Panelist:* **Alex Wilson,** *Director Business Development, Wind River* **Yong CHEN,** *General Design of ARJ-21, COMAC* **Vahid Navidi,** *Chief Engineer's Office Leader, Aviage Systems* **Chunjing WANG (Jenny),** *Certification Manager, Honeywell* **Yao LU,** *Director of Aircraft Airworthiness Institute, CAAC* (invited)

FORUM AGENDA

Wednesday, June 10	
Environmental Factors: Noise, Vibration, and Emissions	
9:00-10:45	This session seeks to cover advances in design for reduced noise and vibration, including advanced controls. This session will also include technologies/techniques for reducing engine emissions. **John LIU,** *LEAP-1C Program Director, GE Aviation* **Cyrille Breard,** *C919 Noise & Emission Manager, COMAC* **Patrick WANG,** *Executive Engineering Leader, GE Aviation China*
Electronics Design and Certification (Part 1)	
11:00-12:30	The session will discuss practices for certification and will address DO-178 Software Considerations in Airborne Systems and Equipment Certification and DO-254 Design Assurance Guidance For Airborne Electronic Hardware as well as the use of Commercial Off-The-Shelf designs. **Alex Wilson,** *Director, Aerospace and Defense, Wind River* **Nicolas Favarcq,** *Director Marketing & Innovation, Spherea Test & Services* **Yunming WANG,** *Shanghai Aviation Technologies Co., Ltd.*
Electronics Design and Certification (Part2)	
13:30-14:30	The session will discuss practices for certification and will address DO-178 Software Considerations in Airborne Systems and Equipment Certification and DO-254 Design Assurance Guidance For Airborne Electronic Hardware as well as the use of Commercial Off-The-Shelf designs. **Mirko Jakoljevik,** *Solution Architect - Integrated Critical Systems, TTTech Computertechnik AG* **Eran Gery,** *Distinguished Engineer, Systems and Software Engineering, IBM*
Panel Discussion: Complex Systems Integration	
14:45-17:30	Airplane systems are increasingly more complex and more integrated. OEMs and suppliers are challenged by the need to successfully develop products that meet stakeholders' needs within planned budgets and schedules. This panel will focus on large system development activities from the establishment of requirements through the design, manufacturing and test phases, to address challenges faced by chief engineers and systems engineers working to develop complex aerospace systems. *Moderator:* **Susan YING,** *Chief Integration Officer, COMAC* *Panelist:* **Eric Peterson,** *Vice-chairman of SAE International S-18 Committee, Electron II* **John HSU,** *AIAA Fellow, ESEP (INCOSE)* **Susan Martin,** *Senior Fellow at Center for Advanced Defense Studies (C4ADS)* **Henry Claeys,** *Senior Technology Fellow, Honeywell* **Eran Gery,** *Distinguished Engineer, Systems and Software Engineering, IBM* **Neil Partridge,** *Consultant Engineer and Project Manager* **Qing LI,** *Strategy Director of Siemens PLM STS, Siemens Industry Software (Beijing) Co., LTD*

SAE 2015 AVIATION TECHNOLOGY FORUM

Dr. Susan YING

Chief Integration Officer
COMAC

With 30 years of experience in the aerospace industry, Dr. Ying is now the Chief Integration Officer of the Commercial Aircraft Corporation of China (COMAC). In 2013, she retired from the Boeing Company as the Director of Research and Technology. Before joining Boeing, Ying taught at universities and directed research in the DOE Research Labs and NASA Ames Research Center. Dr. Ying is a Fellow of the AIAA and VP-International serving on the Board of Directors. She also serves on the Aerospace Council of the SAE. Dr. Ying is the Program Committee Chair and Executive Committee member in the International Council of Aeronautical Science (ICAS). She was one of the inaugural members in the NASA Advisory Council Innovation and Technology Committee. Dr. Ying holds a Commercial Pilot License and is a FAA-Certified Flight Instructor. She received her PHD in Aeronautics and Astronautics from Stanford University and BS in Mechanical and Aerospace Engineering from Cornell University. As a true believer in life-long learning, Dr. Ying has also taken executive education courses from the Kellogg School of Business Administration, Wharton Business School, and Brookings Institute in Brussels.

David Prevor

Head of Market Research and Forecast
Airbus Helicopters

David Prevor leads the Marketing Analysis and Forecast department in the Airbus Helicopters Strategy & Marketing directorate where he is responsible for market studies that underpin Airbus helicopter product strategy. In this role, David and his team charged with deriving an understanding of the future commercial & military helicopter market .His team is also responsible for assessing short and medium term market trends (demand) for helicopters in order to evaluate the impact on bookings and on design changes. Over the longer term David and his team forecast demand for use in defining generic helicopter design and establishing business plans for new helicopter launches.

Before, David was leading the Market Research and Forecasts department within the Airbus Strategy and Future Programmes directorate that he joined eleven years ago.

David began his Airbus career as a marketing analyst working on aircraft investment cash flow analysis model. He then became an IT project manager, overseeing software development for Airbus and airlines. Later he joined the Airbus flight test directorate involved in the development, validation, and certification of auto flight systems (AFS) for the Airbus A340-600/-500 and A330/A340 enhanced programs.

David graduated from the National School of Civil Aviation (ENAC) as an aeronautical engineer with a specialization in Air Transport Economy (economics, fleet planning, forecasting, financing, and statistics) and Aeronautical Techniques (flight operations, aeronautics, avionics, and control systems).

Henry Claeys

Sr. Technology Fellow
Honeywell

Mr. Claeys has nearly 30 years of aerospace experience spanning technology, systems engineering, systems integration, program management, engineering management / leadership. In his current role as technology fellow, he is responsible for technology strategy, technology development, systems integration and technology transition for Air and Thermal Management systems.

Mr Claeys developed an appreciation and understanding of the China commercial aerospace when he led the formation of a customer focused Aircraft Systems Integration group, arriving in Shanghai in April 2008, even before the establishment of COMAC. He worked closely with COMAC in the early Joint Engineering team studies for the COMAC C919 across multiple mechanical systems as well as control integration concept studies across ATA chapters. He worked with many other Aircraft manufacturers and equipment and system suppliers including Xi'an Aircraft Company in early concept design studies and potential JV explorations. His son was born in Shanghai in 2009.

On his return from 3 years in China, he took overall Chief Engineering responsibility for the large integrated systems for Airbus A350 Extended Mechanical Systems Perimeter (EMSP) presiding in that role from critical design review until certification and entry into service. This integrated perimeter included Auxiliary Power, Cabin Pressure, Bleed Air Control,

SPEAKER BIOGRAPHIES

Wing Anti-ice, Overheat and Bleed Air Leak Detection, Air Conditioning and Temperature Control, Conditioning System for fuel tank inerting, air Ventilation and Control system, and centralized Secondary (galley) cooling system.

Previous responsibilities included Environmental Control Systems (ECS) Chief Engineer, Commercial ECS director, Military ECS Sr Technical Manager and Technology Development Manager and Program Manager. He led the technology development of integrated power and thermal management systems that included integration of high speed starter generator technology in a power and cooling turbo-machine. Sophisticated electric power controls were developed to integrate this system with the rest of the electric power system. This technology made its way to production in a major US military program. He was awarded the Honeywell individual Premier Achievement Award in 2003, the highest honor at Honeywell. He is considered Honeywell's expert in not only cross-system integration, but also Air management and associated systems systems. He is Honeywell's technical expert in integrating bleed leak detection systems into composite aircraft, having seen two systems through development, qualification and certification.

Mr Claeys has a Masters Degree in Mechanical Engineering from Stanford University and a Bachelor's degree in Mechanical Engineering from the University of Virginia.

Kathy, Yuanli KANG

Director of More Electric System Department
COMAC BASTRI

Yuan Li Kang, Ph.D MBA

Kang has 15 years experiences in aircraft system development and product design, specializing in aircraft power supply system: Starter/Generator control system, Power conversion and power distribution system design. Her major is power system, motor control and power electronics respectively for her bachelor, Master and Doctor Degree. Her current research area mainly for the more electric aircraft (MEA) technique including the conceptual design for the e-ECS, e-actuator, WIPS , E-brake system , system simulation and integration.

Kang is also holding MBA from Rotman Business School, University of Toronto.

Yao LU

Director of Aircraft Airworthiness Institute
Center of Aviation Safety Technology, CAAC

Senior Engineer. He received his master degree in material science and technology from the Beijing University of Aeronautics & Astronautics, and works for the China Academy of Science and Technology of Civil Aviation Science and Technology. He participated the type validation projects of Airbus a380, Embraer 190/195 airplanes etc.. He was the TCB secretary and certification team member for ARJ21-700 and now is the TCB member for C919 airplane. He also has research experience and expertise in the areas of aircraft certification compliance technologies.

Amy, Qin ZHU

Systems Certification & Airworthiness Engineer
Aviage Systems

Amy, Qin ZHU is a Systems Certification & Airworthiness Engineer with AVIAGE SYSTEMS. In this role, Amy is responsible for conducting system (APR4754A, DO-297) compliance reviews for IMA systems and providing guidance on certification regulations to internal and external customers including COMAC for the C919 program. Amy obtained COMAC's SAL (supplier airworthiness liaison) delegation in 2013.

Amy's background spans over nine years of experience in system and software development for avionics systems, system and software certification, process improvement and engineering management. She began her avionics career at Honeywell in 2005, as a TSO specialist, conducting certification activities throughout multiple FAA/ESAA TSO and STC programs.

Amy holds a MS in Measurement & Control Technology and Instrument from Southeast University.

SPEAKER BIOGRAPHIES

Prof. Murray L. Scott

Managing Director
Advanced Composite Structures Australia Pty Ltd.

Murray Scott is Managing Director of Advanced Composite Structures Australia, and CEO of the CRC for Advanced Composite Structures, both of which have their head offices in Melbourne, Australia. He is an Adjunct Professor of RMIT University and has 35 years of Aerospace Engineering experience, working in Australia and internationally. His outstanding record of achievement in research and professional activities includes terms as President of the International Council of the Aeronautical Sciences and the International Committee on Composite Materials. He is a Fellow of the Royal Aeronautical Society, the Australian Academy of Technological Sciences & Engineering and several other organisations.

Martin MA

Executive Director of ETA-China
Engineering Technology Associates (China), Inc.

Mr. Martin Ma graduated from Sichuan University with Mechanical master degree and obtained MBA degree from Shanghai Jiaotong University. He joined ETA since 2001, during these fourteen years, he is responsible for strategic development of CAD/CAM/CAE products and operation management in China market. Since 2009, ETA signed the agreement with Dimensional Control System Co. for the promotion of 3DCS software and GD&T technology. ETA, as the VCP (Value Channel Partner) of DCS, works with DCS to support the GD&T technology into Auto and Aerospace industries. Through ETA team's promotion in China, ETA become the top GD&T and CAE software and service provider in China.

Eric Peterson

Vice-chairman of SAE International S-18 Committee
Electron II

Mr. Peterson is currently Vice-President of Systems and Safety for Electron International, Inc. He has over 35 years experience in aerospace management, system design and analysis, development of hardware and software, and safety assessments for commercial and military flight critical avionic and fly-by-wire system applications. He is also an inactive Systems and Equipment DER with a software endorsement. Mr. Peterson serves as vice-chairman of the SAE S-18 Committee and has provided key contributions to ARP4754A, ARP 4761, and ARP 5150. Mr. Peterson is also a member of the SAE AeroTech General Committee and has served as the Technical Program Chair for a number of SAE conferences. In addition, he is the recipient of the SAE Forest R McFarland Award for outstanding contributions to the SAE Engineering Meetings Board and is also the recipient of the SAE Outstanding Contribution Award for his work in the development of SAE Technical Standards. Mr. Peterson received his B.S. in Electrical Engineering from Montana State University.

Alex Wilson

Director Business Development
Wind River

Alex Wilson obtained a BSc(Eng) in Electrical Engineering from Imperial College, London in 1986. Prior to Wind River, Alex worked at British Aerospace on Automated Test Equipment for various Inertial Navigation Systems using VME and RTOS technology. He then worked as a Field Applications Engineer (FAE) for Motorola Computer Group working with 68k and PowerPC VME boards and 3rd party Real Time Operating Systems. He joined Wind River in the UK as an FAE in 1996 supporting VxWorks and Tornado. In 2002 he became European Business Development Manager for Wind River focusing on the Aerospace and Defence market. As Director of Business Development, Aerospace and Defence for Wind River, he is responsible for A&D programs, and is part of the Wind River Strategic Marketing Team.

Vahid Navidi

Chief Engineer's Office Leader
AVIAGE SYSTEMS

Mr. Navidi is Chief Engineer's Office leader for the AVIAGE SYSTEMS. He is responsible for managing the Chief Engineer's Office organization which includes Certification & Airworthiness, Development Quality Assurance, Safety, Reliability, Maintainability and Testability functions. Mr. Navidi has over 28 years of experience in the aerospace business sector managing and leading a variety of highly technical design and development projects for General Aviation and Airtransport customers. He has

broad and extensive experience in engineering design & development, Aircraft Certification and Project Management.

Mr. Navidi has a bachelor and Master degree in Electrical Engineering.

Mr. Navidi is currently residing in Shanghai with his wife and 2 children.

Chunjing WANG (Jenny)

Certification Manager
Honeywell Integrated Technology (China)

ChunJing WANG (Jenny) is the Certification Manager at Honeywell China. In this role, Jenny built and currently leads the China Certification team coordinating with the local COEs (CEL and COMAC), the Chinese aviation authorities, and the Honeywell Product Integrity team in the United States. Under her leadership, the certification team supports approvals of Honeywell avionics and mechanical equipment. Her team is also involved in supporting certifications of OEM equipment.

Jenny also works in a technical capacity as an International Certification Engineer (ICE) and a Technical Standard Order Specialist (TSO Specialist), supporting numerous programs such as B777, B787, A340, A350, G650, C919, and ARJ21. She was the first engineer in China to be designated a TSO Specialist at Honeywell.

Cyrille Breard

C919 Noise & Emission Manager
COMAC

Cyrille Breard is currently holding the position of C919 program Noise & Emission Manager at Shanghai Aircraft Design and Research Institute (SADRI), the product development branch of Commercial Aircraft Corporation of China, Ltd (COMAC).
Current development activities cover community noise, cabin comfort, ramp noise and sonic fatigue as well as emission. And top of his responsibilities, he is extremely involved in broad activities across the company, such as marketing research, flight test
center, risk management, system requirements, organization change,...
He provides technical advices to China member during Civil Aviation Environmental Protection meeting under ICAO for noise and emission.
He is also adjunct Professor at Zhejiang Technical University, Hangzhou and Advisory Committee Member for the department of Mechanical Engineering of the HongKong Polytechnical University.
In 2012, he was awarded by the Recruitment Program of Global Experts (Thousand Talents Program) from CPC Central Organization Department. In September 2012, he
received the National Friendship Award from the Chinese government. In 2013, he was awarded for his outstanding performance during the 5 years anniversary of COMAC. He regularly advises and shares his proposal with State Administration of
Foreigner Experts Affair. (SAFEA), which is an administrative agency of the State Council of the People's Republic of China responsible for certifying foreign experts to provide expertise in mainland China.
Between 2005 and 2010, he managed and participated to several aero-acoustic research development programs at the Boeing Company. Most of those projects directly impacted acoustic liner design of the Boeing 787 and 747-8 airplanes throughthe Quiet Technology demonstrator in partnership with GE, Goodrich, ANA and NASA. In 2001, he was a senior Engineer at Analytical Methods (USA). In 1997, he
was a research Associate at Imperial College at the Rolls-Royce research center of Vibration Engineering (UK). He obtained his PHD diploma from the University of Le Havre (France) in 1996 and performed doctoral and post-doctoral research projects at
National Technical University of Athens (Greece).
In addition, he obtained Technical Management MBA degree from the Foster Business School of the University of Washington (USA) in 2010. He is a senior member of AIAA (American Institute of Aeronautics and Astronautics)

Patrick WANG

Executive Engineering Leader - GE Aviation China
GE Aviation

As Executive Engineering Leader for Aviation in China, Patrick Wang and his team are developing engineering capability to support and promote GE Aviation growth in China, which includes engine system integration for aircraft and marine programs, supply chain growth and service engineering for the airlines and MRO in Great China Region.

SPEAKER BIOGRAPHIES

Patrick Wang started his engineering career in China Xinhua Airlines. Patrick Wang joined GE Engine Service (Xiamen) as engineering manager in 2001 and also in charge the Customer Support later. He transferred to GE CTC (China Technology Center) in May 2003 as the ARJ21 on-site system integration leader, and grew his responsibility in this program. Patrick was promoted to lead the GE Aviation China Engineering team in 2008. Under his leadership the China engineering team successfully built many new design and analytics capabilities from zero for business growth in China, such as Nacelle Design, Advanced Engine Manufacturing and Engine Big Data Analyst etc, that enhanced GE Aviation business growth with better customer services. Patrick received GE Aviation Globalization Award in 2012.

Patrick Wang was born and grew up in Harbin. He got the Bachelor Degree in ME from Northwest Polytechnic University in 1993, MBA from Nankai University in 2002 and EMBA from CEIBS in 2012. Patrick Wang started to build model airplane in high school that is why he selected aviation industry as a career. Patrick likes sports, travel and reading books.

Nicolas FAVARCQ

Director Marketing & Innovation
Spherea Test & Services

Nicolas Favarcq is responsible for Marketing and Innovation department within Spherea Test & Services. His team is in charge of creating next generation products such as Universal Maintenance Test Benches for Aircraft Units, High Productivity Aircraft Manufacturing Test Products, or Model Based Testing solutions.

He joined Spherea in 2003. Before that he started his career back in 1998 working as for Barfield INC,.a MRO located in Miami. In 2000, he joined Wuilfert, a company designing real time motion simulators, as Engineering Department Director.

Nicolas Favarcq was born in Toulouse, France, in 1975. He graduated as an engineer from the ICAM in Toulouse.

Yunming WANG

Shanghai Aviation Technologies Co., Ltd.

Mr. Yunming Wang obtained his PhD degree from INRIA in March, 2001. He is a member of SC-205/ WG-71, the editorial committee of DO-178C standard series.

Yunming Wang always emphasizes on the integration of theory with practice. On one hand, he gives unique insights to civil aviation airworthiness standards by sharing his years' intensive research. On the other hand, he has rich and solid experience in software development, certification and project management. Yunming Wang has been offering basic training, advanced training, practical training and DER training of airworthiness standards for years. In addition, he provides consulting services on system development and certification. All his work gets high evaluations from customers.

Mirko Jakovljevic

Solution Architect - Integrated Critical Systems
TTTech Computertechnik AG

Mirko Jakovljevic chairs SAE Avionics ATC since 2007, and SAE AS-2D standardization committee since 2008.

His professional focus is on advanced integrated systems, distributed embedded platforms for time-, safety- and mission-critical applications, system design methodology, certification, complexity management and standardization of new technologies in aerospace domain. Dr Jakovljevic has led certification of real time operating systems and complex hardware devices for integrated more electric aircraft systems. Currently he is working as solution architect for integrated critical systems at TTTech – a company focusing on advanced system integration for aerospace, automotive and industrial systems.

He received a Master's and a PhD degree in Computer Technology from Vienna University of Technology, and a MBA from University of London.

SPEAKER BIOGRAPHIES

Eran Gery

Distinguished Engineer
Systems and Software Engineering
IBM

Eran Gery is an IBM Distinguished Engineer and a lead architect for the IBM Continuous Engineering Solution. Eran has over 20 years of experience within the complex embedded systems domain. Eran's current focus is the key transformational aspects of continuous engineering: model based development & simulation, product line engineering, and integration of the systems engineering process into the enterprise, including operations and data analytics. In addition Eran also engages with key worldwide customers in the major vertical markets: Aerospace and Defense, Automotive, and Electronics.

Prior to this Eran was the development manager and the principal architect of the Rhapsody product at IBM Rational Software, a market leading model driven engineering solution.

Eran was also part of the original UML and SysML specification teams in the OMG. Eran's main areas of interest are Systems Engineering, Model Driven Development, Engineering Lifecycle Management, and the Industrial Internet (IoT).

Early in his career Eran was an embedded software engineer at a major A&D company.

Eran holds an MSc and BSc degrees in computer science from the Technion, Israel Institute of Technology.

John HSU

AIAA Fellow
ESEP (INCOSE)

John C. Hsu, Ph.D.,P.E.,AIAA Fellow,INCOSE ESEP, has over thirty (30) years of diversified experience in Systems Engineering, Aerospace Engineering, Mechanical Engineering, Nuclear Engineering, software development and engineering management, and has worked as technical manager, project manager, principal investigator and project leader, mainly at The Boeing Company. Hewas among the first group of people in the world working on systems engineering at the onset of systems engineering revitalization. He implemented the first break-through systems engineering applications for the Boeing/Airlift and Tanker Programs.

Dr. Hsu is the President of Systems Management and Engineering Consulting Services, Adjunct Professor at California State University Long Beach, Board Member and

instructor of the University of California Irvine Systems Engineering Certification Program, Honorary Professor of Queens University in United Kingdoms, and Royal Academy of Engineering Visiting Professor.

Neil Partridge

Consultant Engineer and Project Manager

Neil has 26 years of international experience - gained predominantly in the aerospace and defence sector.

Neil has recently returned to Brisbane, Australia, after a period working for Calibre Global and Project Managing complex systems upgrade programme in North Queensland.

Neil began his career at Ferranti Defence Systems, Scotland. Whilst working full-time, Neil completed a BSc in Electrical and Electronic Engineering. Neil spent the majority his career at Ferranti engaged as a Radar Systems Test Engineer.

Neil then moved to BAE Systems where he was responsible for software integration activities on the Tornado aircraft. Neil also Project Managed the integration of software and hardware for the German and Italian airforce Tornado.

Following this, Neil worked for Rolls Royce on development and integration of the Eurofighter Engine Management System Software. He then spent a period consulting and Project Managing the Year 2000 programme at BAE Systems Chadderton site.

He then worked for Boeing on the Nimrod MRA-4 programme. In this capacity, he was responsible for the integration and qualification of several software functionality elements onto that platform.

Neil then enjoyed a period in the US working for Boeing Commercial Aircraft. As a Senior Systems Engineer, he was responsible for in-flight entertainment integration and was instrumental in developing processes and procedures to improve organisational efficiency.

Neil relocated to Brisbane, Australia and worked for Boeing Australia – undertaking software integration and test activities on the F1-11 platform. During this period, Neil was also a member of the organisations Systems Engineering Process Council and was the inaugural Integration and Test chairperson for Boeing Australia.

Neil spent a brief period in Madrid working as a consultant to EADS-Airbus on the A330MRTT programme undertaking environmental compliance analysis and software integration activities.

Neil then worked for Brisbane based technology company, Intellection. In that capacity he worked as Integration and Test Manager establishing test and certification methodologies for the company's products.

Neil was the Chief Engineer at Metal Storm – a Brisbane based defence company. Neil was responsible for leading the development of the company's electronically fired, multi-shot weapon systems.

Neil has two children and resides in the western suburbs of Brisbane. Neil enjoys football, motorcycle racing, reading, technology and keeping fit.

Qing LI

Strategy Director of Siemens PLM STS
Siemens Industry Software (Beijing) Co., LTD

Engineer and PhD of ENSAM in France. Li specializes in system modeling and simulation studies, and boasts rich experience in the modeling and simulation of the complicated hydraulic and mechatronic system. He has worked with a host of customers both home and abroad on their system simulation projects, such as the modeling and study of Reynolds' AMT synchronizer, the modeling and simulation of BorgWarner's pressure and flow control valve, and the modeling of Siemens' high pressure common rail system of the engine. After coming back to China, he presided over and completed a series of projects related with hydraulic pressure, such as the Study and Experiment of the Development of the Automatic Gearbox project of an automobile organization; the simulation of the hydraulic pressure control system of the automatic gearbox of an automobile organization; the modeling analysis of the cushion valve of the automatic gearbox of a weaponry organization; torsional vibration analysis of the engine and drivetrain of an weaponry organization; real-time simulation of the engine of a vessel organization; analysis of the large-scale high pressure hydraulic system of a vessel organization; they simulation analysis of the special air valve for rockets of an aerospace organization. Li is now the strategic development director of Siemens PLM STS.

Alicia, Huiying LI

Chief Integration Officer's Assistant
Shanghai Aircraft Design and Research Institute

Huiying Li is the Executive Assistant for the Chief Integration Officer of COMAC. She supports the CIO to establish the Systems Engineering and Integration Center of Excellence (CoE), including strategizing, planning, and organizing the capability teams. Prior to this role, Ms. Li worked as the Lead of Project Management Office for wide-body aircraft, managing the Electromagnetic Environmental Control design for ARJ21-700 aircraft. Ms. Li joined the COMAC division Shanghai Aircraft Design and Research Institute (SADRI) in 2008 and worked in Integrated Avionics Department. Alicia was selected to attend Cranfield University by COMAC. She received her Master Degree in 2013. The thesis title is 'Visual Cueing for Collision Avoidance System'.

REGISTRATION INFORMATION

Forum Registration Fee

Category	Fee
Jun. 9-10 (Two Days)	￥ 3,000.00
Jun. 9 (One Day)	￥ 1,600.00
Jun. 10 (One Day)	￥ 1,600.00

Register & More Info:

Contact： Miss. Echo WEN
Phone: +86-21-6140-8922
Email: echowen@sae.org
Online Registration: www.saeatf.org

Conference registration includes access to all conference materials, and coffee break & lunch.

*Cancellations: If you are unable to attend, you can send a colleague in your place by contacting China Office with the details. If you have to cancel, we will refund your payment less an administration charge. Cancellations can only be accepted in fax or email.

A CNY 400/USD 65 processing fee will be assessed for each canceled registration that results in a refund before May 9, and only refund 50% will be refunded before Jun 1, and there will be no refunds after Jun 1.

Cooperation & Sponsorship in China	Strategic Cooperation in China
Contact：Mr. Jay JIANG	Contact：Ms. Maggie MAO
Phone:021-6140-8921	Phone:021-6140-8909
Email: jayjiang@sae.org	Email: maggiemao@sae.org

Technical training in conjunction with the forum: (Details please find in P 14)

(Pass the test can get the degree of US IACET Continuing Education Units (CEUs) & Shanghai CEUs)

Training Courses	Early Bird (Registered 1 month before the seminar)	Fee
June 4-5 (2 days) ARP4761 and the Safety Assessment Process for Civil Airborne Systems	￥ 3,000.00	￥3,600.00

Contact Us:

Registration
Contact: Echo WEN
Phone： 021-6140-8922
Email: echowen@sae.org

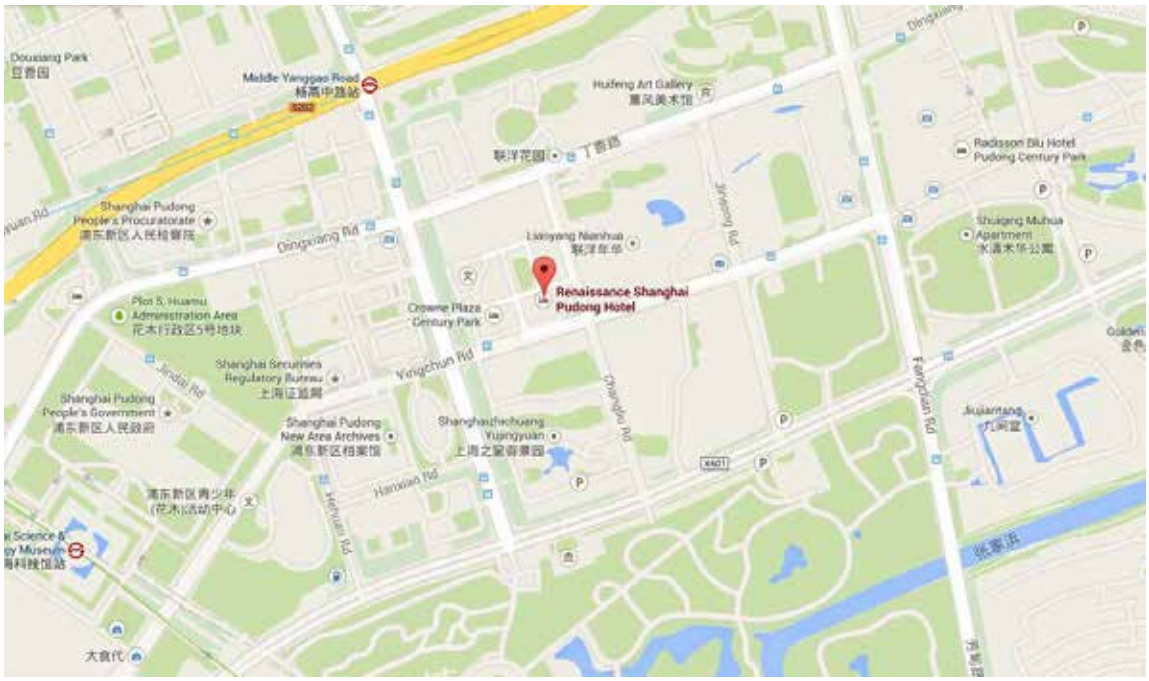
VENUE LOCATION

Venue Location: Renaissance Shanghai Pudong Hotel (4th Floor)

Address: No.100 Changliu Road, Pudong District, Shanghai, China
Phone: +86-21-38714888
Fax: +86-21-68540888
Special SAE International Room Rate:
Deluxe Room: CNY 900/night + 15% service fee
(Includes Internet & 1 breakfast)

Information of Local Transportation:

- To Metro Line 9 Middle Yanggao Road Station: Around 710m
- To Shanghai Pudong International Airport: Around 35km — Taxi fee: around CNY 150.00
- To Shanghai Hongqiao Airport: Around 23km — Taxi fee: around CNY 90.00



ARP4761 and the Safety Assessment Process for Civil Airborne Systems

ID#: C1245
Date: June 4-5, 2015 (2 days)
Instructor: Eric M. Peterson
Language: English
Shanghai CEU: 4.0
CEU (US) : 1.3
Classroom: Renaissance Shanghai Pudong Hotel
Address: 100 Changliu Rd, Pudong, Shanghai
Fees: ￥3,600; **Early Bird:** ￥3,000 (Register Before May 8)

ARP4761 describes guidelines and methods for performing safety assessments. This recommended practice is associated with showing compliance with certification requirements (14CFR/CS Parts 23 and 25, section 1309) and assisting a company in meeting their own internal safety standards. The safety processes described are primarily associated with civil airborne equipment but the processes and tools may be applied to many applications.

This 2 day seminar provides attendees with the guideline information for conducting industry accepted safety assessments consisting of Functional Hazard Assessment (FHA), Preliminary System Safety Assessment (PSSA), and System Safety Assessment (SSA). Discussion on various safety analysis methods needed to conduct the safety assessments is included. Safety analysis methods including Fault Tree Analysis (FTA), Dependence Diagram (DD), Markov Analysis (MA), Failure Modes and Effect Analysis (FMEA) and Common Cause Analysis (CCA). CCA is composed of Zonal Safety Analysis (ZSA), Particular Risks Analysis (PRA), and Common Mode Analysis (CMA) and will be covered in this seminar.

In addition to the seminar handout, a copy of the ARP4761: Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment standard will be provided to each attendee.

Learning Objectives

By attending this training program you will be able to:

- Identify multiple safety assessment methods and tools
- Relate the key attributes of ARP4761 FHA, PSSA, SSA, FTA, DD, MA, CCA
- Identify the applications for safety tools
- Identify the interaction between the safety processes and the development processes
- Apply multiple safety methods in completing a PSSA or SSA
- Evaluate future tools and methods for inclusion in ARP4761A

Who Should Attend

This course is designed for engineers and professionals, working at all levels, who are involved in or interact with the aircraft and/or aircraft system safety assessment processes.

Topical Outline

DAY ONE

- Course Overview
- Key Definitions
- Introduction and overview of ARP4761 course material
- Safety / Development Process
- Functional Hazard Assessment (FHA)
- Preliminary System Safety Analysis (PSSA)
- Fault Tree Analysis (FTA)
- Dependency Diagram (DD)
- Markov Analysis (MA)

DAY TWO

- Failure Modes & Effects Analysis (FMEA)
- Common Cause Analysis (CCA)
  - Particular Risks Analysis (PRA)
  - Zonal Safety Analysis (ZSA)
  - Common Mode Analysis (CMA)
- System Safety Analysis (SSA)
- Contiguous Example (Appendix L)
- ARP4761A

  - New tools / methods in the works
  - Revision A timeline
- Summary and Review
  - Review of presented material
  - Question and Answer

Instructor(s): Eric M. Peterson

Mr. Peterson is currently Vice-President of Systems and Safety for Electron International, Inc. He has over 35 years' experience in aerospace management, system design and analysis, development of hardware and software, and safety assessments for commercial and military flight critical avionic and fly-by-wire system applications. He is also an inactive Systems and Equipment DER with a software endorsement. Mr. Peterson serves as vice-chairman of the SAE S-18 Aircraft & Systems Development and Safety Assessment committee and has provided key contributions to ARP4754A, ARP 4761, and ARP 5150. Mr. Peterson is also a member of the SAE AeroTech General Committee and has served as the Technical Program Chair for a number of SAE conferences. In addition, he is the recipient of the SAE Forest R McFarland Award for outstanding contributions to the SAE Engineering Meetings Board and is also the recipient of the SAE Outstanding Contribution Award for his work in the development of SAE Technical Standards. Mr. Peterson received his B.S. in Electrical Engineering from Montana State University.

SAE China Office
Room 2503, 1350
North Sichuan Rd,
Hongkou,Shanghai
Tel：021-6140-8900
Fax：021-6140-8901
www.sae.org.cn