SAE REACHES HISTORIC AVIATION STANDARDS AGREEMENT WITH CHINA AERO-POLYTECHNOLOGY ESTABLISHMENT

SAE International and the AVIC 301 Institute (China Aero-Polytechnology Establishment, or CAPE) entered into a historic agreement that provides eight major-scale Chinese enterprises with access to SAE International’s active aerospace technical standards.

Announced in September, the agreement is the result of efforts which followed encouragement by the Chinese Ministry of Information and Technology (MIIT) for China’s aviation and aerospace industries to become more familiar with, and adopt, international standards.

“SAE International and the China Aero-Polytechnology Establishment have partnered on many excellent activities over the years,” said David L. Schutt, Chief Executive Officer of SAE International. “This agreement is a continuation of that successful and strategic relationship. We are pleased to work with CAPE in helping the industry to understand and deploy such relevant and essential international standards.”

Through the agreement, the eight Chinese enterprises will access the active aerospace standards through SAE International’s Digital Library, a web-based...continued on next page
SAE’s Aerospace Council met at the offices of the European Aviation Safety Agency (EASA) in Cologne, Germany, on September 24-25.

Patrick Ky, Executive Director of EASA opened the Council’s meeting with a welcome address in which he noted that EASA plans to use even more industry standards in the future.

“We put (standards) at the heart of EASA’s technical specifications, such as Certification Specifications and Acceptable Means of Compliance,” Ky said. “The partnership we enjoy with SAE is at the heart of this strategy...EASA has a vision for the future where the role of (industry standards) will be even greater.”

During the meeting, the SAE Franklin W. Kolk Air Transportation Progress Award was presented to Yves Morier, Head of General Aviation and RPAS (Remotely Piloted Aircraft Systems) at EASA. This award recognizes individuals for their unique and outstanding contributions to the interpretation and/ or to the work of aerospace technical committees in developing aerospace standards.

A former long-serving member of SAE’s Aerospace Council and a member of EASA since 2004, Morier was recognized for his vision and leadership over the past 25 years with the Joint Aviation Authorities (JAA) and EASA to support the inclusion and reliance on industry standards in European technical regulations:

The workshop’s keynote speech was given by Dr. Richard Greaves, SAE President-Elect and Chief of Technology Officer Emeritus, Meggitt PLC. Its opening was given by Dr. Bala Bharadwaj, Leader of Engineering, Operations & Technology for Boeing India and Chair of the SAE India Aerospace Board. Closing remarks were presented by Dr. Bharadwaj and David Alexander, Senior Coordinator, SAE Aerospace Standards Europe.

By plenary talks were given by: Dr. Ravi Rajamani of Meggitt and the HM-1 Chair; Professor Ian Jennions of the Cranfield IVM Centre; David Pinney of Boeing; and Dr. Steve Heath of Eiland Airways.

SAE PARTNERS WITH ROYAL AERONAUTICAL SOCIETY TO HOLD MAINTENANCE CREDITS WORKSHOP

SAE International partnered with the Royal Aeronautical Society’s Air Transport Group to present the “Civil Aircraft Technology Enabled Services – A First Step Towards Achieving Maintenance Credits” workshop in London on October 24th.

The goal of this event, which marked the first such partnership between SAE and the Royal Aeronautical Society, was to initiate a process to develop an industry-wide approach towards achieving maintenance credits for using IVHM technologies.

The workshop’s opening remarks were presented by conference chairs Dr. Richard Greaves, SAE President-Elect and Chief of Technology Officer Emeritus, Meggitt PLC, and Martin Broadhurst, President-Elect of the Royal Aeronautical Society (RAeS).

The event featured participation by many members of SAE’s HM-1 Integrated Vehicle Health Management Committee and E-32 Aerospace Propulsion Systems Health Management Committee.

The workshop began with views from the airline industry by Dr. Steve Heath of Eiland Airways, and from the maintenance function by Dirk van den Herik, A/F/KLM Engineering and Maintenance. Alastair Healey and Jean-Pierre Arnaud of EASA then provided an in-depth review of the certification and maintenance processes relevant to the use of IVHM and health management technologies for maintenance. Industry standards were highlighted as a key component of the regulatory process and David Alexander of SAE International gave an update of the SAE standards activities under the SAE IVHM initiative.

The event also featured sessions on these topics:

• Data interoperability, led by Charlie Dibsdale, Chief of Engineering Research and Intellectual Property, Controls and Data Services, Rolls-Royce
• The maintenance credits process, led by Ken Pipe, Principle Engineer at Humaware
• Steps for early engagement with the regulator, led by the EASA delegates.

A follow up meeting, which again will be a partnership between SAE and the RAeS, is being planned for the spring of 2015.
SAE RECEIVES FAA TASK REQUESTS FOR STANDARDS ON RFID, HELICOPTER HOISTS

In October, SAE International received two tasking requests from the U.S. Department of Transportation Federal Aviation Administration (FAA) to develop standards on active radio frequency identification (RFID) and helicopter hoists.

The G-18 Radio Frequency Identification Aero Application Committee will work on the FAA’s requests for new minimum performance standards for active RFID tags and sensors intended for use on aircraft, and a new aerospace recommended practice providing guidance for a means to show compliance with FAA regulations for RFID installations and design.

The agency also requested the creation of new minimum performance standards for hoists that are installed on helicopters for various operations (including external cargo hoist, search and rescue, and other operations). In addition to the specification on hoist design, the FAA also requested a new aerospace recommended practice providing guidance for a means to show compliance with FAA regulations for hoist installations and design.

A new SAE committee is being formed to address hoist performance standards. Those interested in participating may contact Laura Feix at lfeix@sae.org. A kickoff meeting for this committee is tentatively scheduled for January or February 2015.

The contact for the SAE G-18 committee is Bruce Mahone at bmahone@sae.org.

SAE 2015 PRESIDENT-ELECT HAS MADE SIGNIFICANT CONTRIBUTIONS TO NUMEROUS AEROSPACE STANDARDS COMMITTEES

In October, SAE International’s Executive Nominating Committee named Richard Greaves, PhD, its candidate for 2015 SAE International President. Dr. Greaves, Chief Technology Officer at Meggitt PLC, has long been one of the strongest supporters of SAE’s aerospace standards program.

He is the outgoing Chairman of the SAE International IVHM Steering Group, a position in which he has served since the group was formed in 2010. He has been a long-time member of the G-32 Committee, and a member of the U.S. Composites G-22 committee’s chair, and has been a leading member of the HM-1 Integrated Vehicle Health Management Committee. An SAE Fellow, Greaves received the SAE Technical Standards Board Outstanding Contribution Award in 2009.

He is being succeeded as Chair of the IVHM Steering Group by Rhonda Walthall, Manager of Prognostics and Health Management, UTC Aerospace Systems. She has previously served as Vice Chair of the IVHM Steering Group, Chair of the E-32 Committee, and a member of the HM-1 Committee.

ROBERT IRELAND NOMINATED AS SAE VICE PRESIDENT – AEROSPACE

Robert Ireland, Managing Director of Engineering and Maintenance at Airlines for America, has been nominated to serve as SAE International’s 2015-17 Vice President-Aerospace.

Ireland has served as Chair of the Technical Standards Committee, General Chair of the 1997 World Aviation Congress. He has also been a member of the Engineering Meetings Board; the SAE Foundation Board of Trustees, the Finance Committee, the Technical Standards Board, the Aerospace Council, and the Board of Directors. He is currently Assistant Treasurer and Chair of the Finance Committee.

At Airlines for America, a trade organization representing the principal U.S. airlines, Ireland coordinates engineering and maintenance interfaces among member airlines and an array of government and industry entities.

NOMINATE AN AEROSPACE COLLEAGUE FOR AN UPCOMING SAE AWARD

(Deadline is December 31, 2014)

Submit nominations at www.sae.org/awards. Need assistance with an award nomination? Contact the SAE Awards staff at awards@sae.org, 1-877-606-7323 (U.S. and Canada only) or 1-724-776-4970 (outside U.S. and Canada).

■ SAE Aerospace Engineering Leadership Award

This award honors an individual at the corporate official level for outstanding contributions to the field of aerospace engineering through his/her leadership skills.

■ Clarence L. (Kelly) Johnson Aerospace Vehicle Design and Development Award

This award recognizes individuals who have distinguished themselves by making significant contributions during their career in the innovative design and development of advanced aircraft and/or spacecraft.

■ Franklin W. Kalk Air Transportation Progress Award

This award recognizes an individual for outstanding contributions to air transportation and/or the work of aerospace technical committees in developing standards, specifications, technical reports, and data.

■ Marvin Whitlock Award

This award recognizes an individual for significant contributions and/or innovation related to operational availability of aircraft.

AEROSPACE ENGINE SUPPLIER QUALITY COMMITTEE PUBLISHES FIRST STANDARD, PLANS TRAINING COURSE

SAE International’s G-22 Aerospace Engine Supplier Quality (AESQ) Committee issued its first standard, “AS13000: Problem Solving Requirements for Suppliers,” in May. This standard describes the process suppliers shall use to respond to a customer request for corrective and preventive action.

This standard also marks the first time that an SAE standard was published in both English and French. (The French version is “AS13000FR: Exigences en résolution de problèmes pour les fournisseurs.”)

AS13000 adopts the popular 8D (eight disciplines problem solving) approach that is widely recognized across industry. It can also be supported globally through existing external training and consultancy organizations.

The G-22 committee is also continuing to work on other standards for publication in the near future. One such standard will be AS13001, “Supplier Self Release,” which will define the requirements for a supplier’s self-release program. To identify the competency requirements for personnel conducting self-release activities within their supplier organization, the committee has teamed with SAE Professional Development to develop a standardized foundations training course.

This three-day course, “Aerospace Supplier Quality: Common Training for Self-Release Delegates,” will be available through SAE International beginning in the first quarter of 2015, intended to improve consistency and quality, this course will also remove the duplication between each delegating organization’s individual training requirements, resulting in reduced training costs for suppliers.

THE STANDARD FOR AEROSPACE INNOVATION

SAE International knows that it is people who advance technology. Since 1916 it has worked hand-in-hand with the aerospace community to find solutions to its most common problems through such globally adopted technical documents as Aerospace Standards (AS), Aerospace Material Specifications (AMS), Aerospace Industry Reports (AIR), and Aerospace Recommended Practices (ARP)—becoming the world’s largest, most respected aerospace standards development organization.

While its rich standards development history enables SAE International to offer an array of capabilities to serve industry’s growing need for future technology, it also enables it to offer a supporting variety of services to help aerospace organizations, including lifelong learning, education, technical publishing, and events – work to ensure the pipeline of future engineering talent and keep today’s practitioners at the forefront of professional growth.

www.sae.org
S.A.E. 10 COMMITTEE WORKS WITH NEW JERSEY HIGH SCHOOL TO UPDATE AEROSPACE STANDARDS

S.A.E. International’s A-10 Aircraft Oxygen Equipment Committee is working with Kittatinny Regional High School in Newton, New Jersey on a project to create updated electronic drawings for older S.A.E. documents.

Jim Stabile of the A-10 committee approached Doug Carnegie, a Technology Education Teacher at the school with the idea of having students work on the document conversion project.

“The partnership provides the committee with updated electronic drawings and gives students real-world recognition and scholarship opportunities. “As a high school teacher, giving students the opportunity to work on real-world projects that connect my lessons to something the student can apply to a tangible outcome is a win-win for everyone,” wrote Carnegie in a recent article published in S.A.E. Update.

In December 2012, the D.O.D. had encountered cost, schedule, and quality problems on its weapon systems due to a lack of focus on sound manufacturing management standard. The Council issued a Defense Standardization Council approved the development of a manufacturing management standard. The Council issued a clarification in March 2012, directing the development of a non-government standard (as opposed to a military standard).

The student Carnegie chose to work on the project was Ryan Jeskey, and the first document converted was AIR1558b.

“S.A.E. has provided Jeskey and the school with awards and accolades to recognize the many hours of work completed,” Carnegie wrote. “Working with S.A.E. has not only shown Ryan real-world applications for his talents, but it has also provided him the opportunity to access many forms of scholarships provided by S.A.E. As we move forward, new students will be recruited to help continue the successful partnership between S.A.E. and Kittatinny Regional High School.”

For his leadership in this program, Jim Stabile, Vice President, Aeronautical Data Systems Inc., was recognized at the October A-10 committee meeting.

FLIGHT DECK LIGHTING STANDARD SIGNIFICANTLY REVISED

“S.A.E. ARP4013: Flight Deck Lighting for Commercial Transport Aircraft,” has recently been revised and released by the S.A.E. A-20 Aircraft Lighting Committee. This new extensive revision reaffirms that ARP4013 is pertinent to the aviation industry, changes the content to keep up with the state of the art, and adds clarification where needed.

ARP4013 contains recommended flight deck lighting design and performance criteria to ensure prompt and accurate readability and visibility, color identification, and discrimination of needed information under all expected ambient lighting and electrical power conditions.

The revision has been in the works for approximately seven years by the A-20A Crew Station Lighting Committee, said Steven Ellersick of the A-20 committee. In 2008, the committee identified numerous S.A.E. documents dealing with deck lighting design and certification and performance criteria to ensure prompt and accurate readability and visibility, color identification, and discrimination of needed information under all expected ambient lighting and electrical power conditions.

The course was presented by Michel Todeschi, Head of Electromechanical Systems, Raytheon, and Harriet Griffin, Raytheon.

Among the manufacturing management tools required by the standard is Manufacturing Readiness Levels which, Karr said, are quickly becoming the generally accepted approach, at least within the D.O.D. industry, and even in other industries, for measuring your manufacturing maturity and level of risk. It’s a tool that the standard imposes that’s widely recognized and has a common language that everyone understands. The standard addresses the use of that tool very early on in the life cycle so that early on we understand where our manufacturing risks are and we can start addressing them.

The standard will be incorporated into new Air Force contracts soon after it is adopted, Karr said. It may be applied in its entirety or tailored to each program’s specific needs.

NEW MANUFACTURING MANAGEMENT STANDARDS RELEASED

(Adapted from an article previously published in Aerospace Engineering magazine)

A new manufacturing management standard, designed to encourage suppliers and OEMs to put more focus on manufacturability during the early phases of a product’s life cycle, was published by S.A.E. International’s G-23 Manufacturing Management Committee in November.

The standard, “A65001: Manufacturing Management,” is intended for use on all programs with manufacturing content, and requires proven manufacturing management practices.

“The standard will require certain activities to be accomplished and certain assessments of manufacturing maturity to be done early in the life cycle,” said the standard’s sponsor, David Karr, G-23 Committee Chair. “It applies all the way through development and production—and even in the sustainment phase, so when major modifications to weapons systems are being done, it will also cover those major modifications.”

Requested by the Department of Defense (DoD), which identified a need for improvements and standardization in the area of manufacturing management, the standard is primarily intended for use in the defense industry, but may be applicable to other commercial industries.

DoD had encountered cost, schedule, and quality problems on its weapon systems due to a lack of focus on sound manufacturing principles and practices. In November 2011, the Defense Standardization Council approved the development of a manufacturing management standard. The Council issued a clarification in March 2012, directing the development of a non-government standard (as opposed to a military standard).

In December 2012, the D.O.D. created a working group to carry out that effort. In addition to drafting a working document, the group also was directed to select an outside organization to create a commercial, vs. military, standard. In September 2013, S.A.E. International was selected for that work. A new S.A.E. committee, G-23 Manufacturing Management, was formed.

Consisting of approximately an equal number of D.O.D. officials and industry (including representation from Lockheed Martin, Boeing, Raytheon, BAE, GE, and Northrop Grumman), the roughly 40 G-23 members reviewed and revised the initial draft standard in 2014.

Among the manufacturing management tools required by the standard is Manufacturing Readiness Levels which, Karr said, are quickly becoming the generally accepted approach, at least within the D.O.D. industry, and even in other industries, for measuring your manufacturing maturity and level of risk. It’s a tool that the standard imposes that’s widely recognized and has a common language that everyone understands. The standard addresses the use of that tool very early on in the life cycle so that early on we understand where our manufacturing risks are and we can start addressing them.

The standard will be incorporated into new Air Force contracts soon after it is adopted, Karr said. It may be applied in its entirety or tailored to each program’s specific needs.

SHORT COURSES HELD IN CONJUNCTION WITH A-6 COMMITTEE FALL MEETING

Three short courses – covering aerospace hydraulic components, power electronics, and aircraft hydraulic pumps – were held in conjunction with the S.A.E. A-6 Aerospace Actuation, Control, and Fluid Power Systems Committee meeting, October 20-23, in Santa Barbara, California.

A-6 Chairman Jon Jeffery came up with the idea to offer the courses, with the goals of attracting continued participation in the meetings and increasing committee membership.

“I noticed when I went to other professional societies that courses were being offered in conjunction with the conference,” Jeffery, Director, Innovation and Marketing, Parker Hannifin Corporation, Parker Aerospace. “As a newcomer to these other societies, I could learn very quickly about the new industry. I thought this sort of addition to A-6 meetings would be just what we needed to help attract newcomers. And we had the subject matter experts within our committee that could produce the material.”

The short courses offered during the A-6 meeting were:

- “Aerospace Hydraulic Components,” which provided an overview of the hydraulic components used on aircraft. The instructor was Jeffrey C. Dickey, Executive Vice President – Hydraulics for The Lee Company.
- “Power Electronics for Mechanical Engineers,” covering the context, principles, design drivers, and power of Power Electronics components of various flight applications, including those for harsh environments. The course was presented by Michal Todesch, Head of Electromechanical Actuation and THSA Group, Airbus.
- “Aircraft Hydraulic Pumps – Application, Design and Integration” which offered an overview of aircraft hydraulic pumps, focusing on their application in hydraulic systems, design and performance characteristics, and integration issues. Peter A. Stricker, the Vice Chairman of the Power Sources Panel of the A-6 committee, was the instructor for this course.

CONSENSUS BASED STANDARDS AND MORE FROM SAE

In addition to its world renowned consensus based and globally adopted technical standards S.A.E. provides a full complement of standards capabilities:

- Consensus Standards
- Committee Management
- Standards Consortium
- Administration
- Database Creation and Management
- Accreditation and Certification

SAE International Aerospace Standards Newsletter - December 2014
SAE AEROSPACE COMMITTEES PROVIDE VALUABLE INPUT INTO INDUSTRY’S CONFERENCE ON ICING

The SAE 2015 International Conference on icing of Aircraft, Engines, and Structures, scheduled for June 22-25, 2015 in Prague, Czech Republic, provides participants the highest-quality technical program focusing on meteorology, aircraft icing systems, and ground de-icing operations. Governmental agencies will use this as their platform to discuss critical studies and new developments in icing and deicing standards.

Providing a forum for the aerospace community to meet and discuss the newest regulations governing aircraft icing operations, the event showcases the latest technologies and systems designed to de-ice and anti-ice aircraft and address current challenges as well as future opportunities within the industry. This event is supported by SAE’s AC-9C-Aircraft Icing Technology, AC-9-Aircraft Environmental Systems, and G-12-Aircraft Ground De-Icing Standards Committees, in addition to key governmental organizations in the icing/deicing industry – EASA, FAA, and NASA - all who provide valuable input into the technical program content.

Further event details, including information about the exhibit that is also a part of conference, can be found at the following website: http://www.sae.org/events/icing/

SAE AEROSPACE COMMITTEES PROVIDE VALUABLE INPUT INTO INDUSTRY’S CONFERENCE ON ICING

NEW SAE COMMITTEES, NEW CHAIRS

- **G-25 Avionics & Electronics Corrosion Committee**: In response to the DoD’s request for electronic corrosion standards, this committee will focus on specifications and standards aimed at improving corrosion prevention and control. While primarily intended for corrosion resistance in the harsh operational environments in the defense industry, they may applications to other commercial industries.

- **Newly-formed committees**
  - **G-24 Pb-Free Risk Management Committee for ADHP**: This committee develops standards and specifications for Pb-free electronics risk management for the aerospace, defense and high performance electronics industries. The committee also provides input to government and other industry standards related to Pb-free electronics risk management.
  - **Commercial Space Committee**: This committee deals with standards for commercial reusable launch vehicles. As these vehicles vary significantly in both design and operational parameters, the majority of standards developed will provide performance requirements with wide application latitude to allow a great variety of design, while maintaining safety.
  - **G-10D5 Touch Interactive Display Systems Committee, ARP60494 Guide to Touch Interactive Display Systems: Human Factors Considerations, System Design and Performance Guidelines**: This ARP covers the system design, human interface considerations, and hardware performance recommendations and requirements for touch interactive electronic display systems installed in the cockpit/flight deck for use by pilots.
  - **AE-4 Civil Aircraft EMC Working Group, ARP 60493 Guide to Civil Aircraft Electromagnetic Compatibility (EMC)**: This ARP will provide guidance and best practices for demonstrating civil aircraft electromagnetic compatibility.

First, we have the newly-formed committees. For more information, contact Laura Feix at lfeix@sae.org.

**SAE aerospace standards development**

The steering group will monitor and oversee aerospace standards content and inform affected committees of the banned or restricted substances in their respective standards. The group will also provide standards processes to follow in addressing committee, document, and customer impact, as well as methods to show compliance with regulatory agencies. Where there is no clear material substitution solution, the group will bring the need for a solution to the attention of the Aerospace Council.

For more information, contact Laura Feix at lfeix@sae.org.

**SAE AEROSPACE COMMITTEES PROVIDE VALUABLE INPUT INTO INDUSTRY’S CONFERENCE ON ICING**

FIRST SAE INTERNATIONAL AEROSPACE STANDARDS SUMMIT – JULY 2015

Mark your calendars for the first International Aerospace Standards Summit, hosted by SAE.

• July 7-8, 2015
• Crowne Plaza, Alexandria, Virginia, USA

The summit will focus on the critical importance of standards in emerging aerospace technologies. Global leaders from government agencies and industry will provide strategic insight into how standards can serve as enablers for the implementation of innovative aerospace technologies such as additive manufacturing and electric propulsion.

For more information, contact Laura Feix at lfeix@sae.org.

**ADDITIVE MANUFACTURING TASK GROUP SEeks MEMBERS**

Recognizing that additive manufacturing is an emerging technology within the aerospace industry, SAE International is seeking additional participants for its International Additive Manufacturing Task Group, which is discussing standardization approaches for process-dependent materials. Aerospace engineering professionals with an interest in additive manufacturing are welcome to participate.

The task group’s most recent meeting on September 24 in Grand Rapids, Michigan, featured two speakers – Jeff Calcaterra, Principal Materials Engineer, U.S. Air Force, and Mark Freisthler, Aerospace Engineer, Transport Airplane Directorate, FAA – who discussed additive manufacturing lessons learned and regulatory requirements.

If you’re interested in participating in the SAE International Additive Manufacturing Task Group, contact Laura Feix at lfeix@sae.org or +1-724-799-9198.

**STANDARDS DEVELOPMENT LEADER AND PARTNER**

SAE has become the world’s largest standards development organization by partnering with industry for nearly 100 years to discover solutions to its common problems. Today, it works with companies – and other SDO’s around the world—to create and harmonize standards for the advancement of the global aerospace industry.

- **AeroSpace and Defence Industries Association of Europe (ASD-STAN)**
- **Society of Japanese Aerospace Companies (SJAC)**
- **NATO Standardization Agency (NSA)**
- **European Organization for Civil Aviation Equipment (EUROCAE)**
- **International Air Transport Association (IATA)**
- **National Center for Advanced Materials Performance (NCAMP)**
- **Federal Aviation Administration (FAA)**
- **European Aviation Safety Agency (EASA)**
- **International Civil Aviation Organization (ICAO)**
- **China Aero Polytechnical Establishment (CAPE)**
- **International Aerospace Quality Group (IAQG)**
This list is current as of publication. For updates and changes, go to http://www.sae.org/standards/aerospace/schedule.

### PLAN NOW FOR UPCOMING AEROSPACE TECHNICAL COMMITTEE MEETINGS

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### VOLUNTEER RECOGNITION: DOCUMENT SPONSORS (AUGUST – NOVEMBER 2014)

The SAE Aerospace Standards Development Program wishes to thank its document sponsors. These individuals have served not only as active committee members but have dedicated their time and talent in guiding the development of standards documents from the preparation of all drafts through balloting and publication.

**THANK YOU.**

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### UPDATES TO THE ENROLLMENT OF AEROSPACE COMMITTEE MEMBERS

See the updated list at http://www.sae.org/standards/aerospace/schedule.
SAE AEROSPACE STANDARDS CORPORATE CONTRIBUTION PROGRAM (JANUARY 1 – NOVEMBER 19, 2014)

SAE International acknowledges the following organizations who have contributed to funding the Standards Development Program this year—supporters who acknowledge the benefits common engineering requirements bring to a global industry and their businesses.

THANK YOU.

Company/3M
Adel Wiggin Group
Aero Magn 2000 Yul, Inc.

Aerospac Testing Alliance
Air BP Lubricants

Airlines for America
Alcoa Fastening Systems

Amphenol Fiber Systems International
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Tensolite/Carlise Interconnect Technologies

Tiodize Company, Inc.

The Le Company

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Trelleborg Sealing Solutions US, Inc.

Tri-Star Electronics International, Inc.

Wesco Aircraft Hardware Corp

WireMasters Inc.

SAFETY AND QUALITY

SAE International honored this November 15 mobility engineering professionals with the 2014 James M. Crawford Technical Standards Board Outstanding Achievement Award.

The award recognizes individuals for outstanding service in the technical committee activities of the Society. This includes valuable contributions to the work of SAE International technical committees, unusual leadership in the activities of an SAE International technical committee, significant contributions as a representative of the Society to the accomplishments of technical committees of other organizations or of government agencies, and outstanding contributions to SAE International technical committee work in the form of research, test methods and procedures, and/or development of standards.

Established in 1953, the award honors James Crawford, who was SAE International President in 1945 and donated money to establish the James M. Crawford Fund. In 2013, the award name was changed to the James M. Crawford Technical Standards Board Outstanding Achievement Award. 2014 SAE Aerospace Council award winners included:

• John D’Avirro, Director of Aviation Services, APS Aviation, G-12 Aircraft Ground Deicing Committee

• John Evers, Head of ORB Consulting (Operations Research in Business Consulting), Commander (Retired) U.S. Navy (Reserves), G-47 Systems Engineering Committee

• Warren Prasuhn, Principal System Safety Engineer, Rockwell Collins Inc., S-18 Aircraft & Systems Development & Safety Assessment Committee

CHALLENGES OF ELECTRONIC PARTS AND THEIR IMPACTS ON CONSUMER AND INDUSTRIAL PRODUCTS THE FOCUS OF NEW SAE BOOK

Electronic parts are used throughout industry to run everyday products, such as cell phones, and also highly technical products, such as aircraft, missiles, and spacecraft. SAE International’s new book, “Counterfeit Electronic Parts and Their Impact on Supply Chains,” examines how counterfeit parts are negatively affecting the aviation, spacecraft, and defense sectors and what can be done about it.

Unlike cell phones, which are often replaced every year, the highly technical products may remain in service from 20 to more than 80 years. But what happens if the original electronic part, with a life cycle of 10 months, is no longer available? Some manufacturers have discovered that they have unwittingly purchased counterfeit one.

As the inflow of counterfeit electronic parts does not appear to be slowing down, “Counterfeit Electronic Parts and Their Impact on Supply Chains” investigates the possible solutions to combat the issue, including legislation and standards, and other solutions that are government driven but that may be impacted by cutting budget cuts.

Edited by Kirsten M. Koopsel, Chair of the SAE G-19T Committee, which is developing counterfeit parts terms and definitions, the book also presents a high-level compilation of supply chain best practices identified in a survey of electronic parts manufacturers and government contractors.

With more than 30 years in engineering, production support, research, environmental, manufacturing assistance and policy, Koopsel has a unique view when examining the impact of counterfeiters on the supply chain. Her 10 years in the defense industry involves working in different areas of manufacturing, including design phase for advanced programs such as the National Aerospace Plane and floor support for current programs such as the F-16.

For more information or to order visit: http://books.sae.org/r-438/.

SAE CONTINUES IVHM BOOK SERIES WITH NEW TITLE ON INSIGHTS AND LESSONS LEARNED


With 17, fully illustrated chapters, “Integrated Vehicle Health Management: Implementation and Lessons Learned,” covers diverse areas of expertise such as the impact of trust, human factors, and evidentiary integration in systems development. They are complemented by valuable insights on implementing APU health management, aircraft health trend monitoring, and the historical perspective of how rotorcraft HUMS (Health and Usage Monitoring Systems) opened doors for the adoption of this cutting-edge technology by the global commercial aviation industry.

For more information and to order visit: http://books.sae.org/r-438/.
EXPERIENCE THE MANY BENEFITS STRATEGIC STANDARDIZATION AFFORDS YOU, YOUR ORGANIZATION, THE INDUSTRY.

Standards. The workhorse documents that communicate practices, processes, and products throughout the aerospace industry are also paramount to the advancement of technology. Standards documents are more than the practices of today. They account for history and anticipate the future of technology, regulation, and business. The direct benefits of standards are simple in concept but extraordinary in their global impact toward ever-safer, cleaner, more efficient worldwide transportation.

Technical standards enable and enhance:
• consistent and clear expectations for product performance and reliability
• regulatory compliance
• consistent product quality
• compatibility and interoperability
• more efficient procurement

Standardization also:
• lowers trade barriers
• lowers purchasing costs
• decreases design time
• promotes innovation
• increases new technology speed to market

Because industry can rely on standards for globally harmonized solutions to common issues, individual companies can devote more time and resources to advance their proprietary technology. In this way, standards help foster competition, which advances the collective technology of industry and, in turn, creates the need for new and revised standards. This has been the cycle for nearly a century of aerospace standards solutions.

And, at the heart of those solutions is SAE International, the world’s largest, most respected aerospace standards development organization (SDO). From design to build, operation and maintenance, SAE International works hand-in-hand with the global aerospace community to advance industry.

While participation in the standards development process helps the advancement of the industry it can also contribute to the advancement of your company and personal career.

Corporate Benefits
• Input into the direction of the standards
• Competitive intelligence through advance knowledge of standard direction
• Advance warning of pending regulations and influence over the technical basis of the regulation
• Product liability protections
• Strong relationships with customers and suppliers
• Association with the leading society for advancing mobility technology

Individual Benefits
• Professional development from working contact with peers
• Peer recognition for advancing your industry’s sectors technologies
• Excellent networking and learning opportunities from product developers/users around the world
• Discover emerging technologies
• Contribute to the industry’s body of technical knowledge

To learn more about SAE Technical Standards Development—and for a schedule of Technical Committee meetings—visit us on the web at www.sae.org/standardsdev

Volunteer for an SAE Standards Development Committee. Support standardization.