



# AEROSPACE STANDARDS NEWSLETTER

Creating globally harmonized standards.  
Moving industry forward.

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## SAE AEROSPACE STANDARDS WORKSHOP HELD IN MOSCOW

A workshop on SAE International standards was held in Moscow on August 27th. SAE Aerospace Standards staff personnel and aerospace standards committee leaders gave presentations designed to raise awareness in the Russian aerospace community on SAE aerospace standards activities.

The workshop was attended by approximately 40 experts from the Russian aviation community, including representatives from industry and governmental and research agencies.

The workshop was hosted by United Aircraft Corporation (UAC) and was organized by Andrey Shabrin, Deputy Director of Standardization at UAC and SAE Aerospace Council member, who provided an overview of the Russian aerospace standardization system. The event took place at the Sukhoi Civil Aircraft Co. facility and was chaired by Leonid Vinogradov, First Vice President for Certification at SCAC.

**John Dalton**, Technical Fellow at Boeing, and **Chair of the SAE S-18 Aircraft and Systems Development and Safety Assessment Committee** and SAE Fellow, and **Eric Peterson**, Vice President, Systems and Safety at Electron International II, and

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Attendees at the SAE aerospace standards workshop in Moscow receive information on SAE's standards program.

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**Vice Chair of the S-18 Committee** gave presentations on that committee's standards development work, as well as an analysis of S-18 standards current suitability vis-a-vis safety management system (SMS) requirements.

David Alexander, Senior Coordinator, SAE Aerospace Standards Europe provided workshop attendees with an introduction to SAE's aerospace portfolio, focusing on the aerospace standards program. This included details on how SAE standards are used by both industry and regulatory agencies. He also discussed the increasing Russian participation in SAE standards development.

The workshop also featured presentations from Natalya Setalova, Quality Manager, VSMPO on the Russian supplier perspective on using SAE AMS standards, and **Maxim Volkov representing International Aerospace Navigation Services, which chairs SAE's G-10 Wake Vortex (G-10WV) Committee.**

The meeting provided a fruitful opportunity for communication between SAE and the Russian aerospace community, and paved the way for increased cooperation and participation of Russian experts in SAE standardization activities.

## A-4 COMMITTEE FOCUSES ON EFIS DISPLAYS IN RESPONSE TO FAA TASK REQUEST

SAE International has received a Task Request from the Federal Aviation Administration (FAA) to develop a new standard that covers minimum performance standards for Electronic Flight Instrument System (EFIS) display.

In response, **SAE's A-4 Aircraft Instrument Committee** has created an **EFIS Working Group** to develop a standard that will recommend criteria for EFIS displays that are intended for use in the flight deck by the flight crew in all 14 CFR Part 23, 25, 27, and 29 aircraft.

The standard will specify requirements for EFIS displays intended to: show information critical to flight, including airspeed, altitude, heading, attitude, vertical speed and yaw; show navigational and weather information from multiple systems; and show information about the aircraft's systems, including its fuel, electrical and propulsion systems (engines), situational awareness information, and other safety related information.

Presently, the FAA does not have a single Technical Standard Order (TSO) that addresses the operational and functional requirements for an EFIS display. The new standard will extract EFIS-related display requirements from multiple TSOs and centralize them in one document. The FAA is then expected to create a new TSO recognizing the SAE standard as the minimum performance standard operational/functional requirements.

The **A-4 EFIS Working Group is co-chaired by Dara Gibson of the FAA and Bharat Vakil of Gables Engineering.** For more information on this group, or to participate, contact Kevin Bires at [kbires@sae.org](mailto:kbires@sae.org).

This forthcoming standard on EFIS Displays is one of nine Task Requests that SAE Aerospace has received from the FAA. Three standards developed in response to FAA requests have already been published. They are:

- AS8054A, Minimum Performance Standard for Underwater Locating Devices (Acoustic) (Self-Powered)
- AS6254, Minimum Performance Standard for Low Frequency Underwater Locating Devices (Acoustic) (Self-Powered)
- AS8059, Carry-On Portable Oxygen Concentrators

Additional FAA Task Requests currently in development by SAE aerospace standards committees are:

- Adverse Impact to EFVS Operations Due to Transitioning Airport Lighting Systems to LED
- AS6163, Active Temperature Controlled Shipping Container – Performance Requirements and Test Parameter
- AS8036A, Cargo Compartment Fire Detection Instruments
- AS8006A, Minimum Performance Standard for Pitot and Pitot-Static Tubes
- AS3610x, Pallet Net Test Method Standard

Additionally, SAE has received requests from the European Aviation Safety Agency (EASA). In response, AS6271, Halocarbon Clean Agent Hand-Held Fire Extinguisher, was published by the **S-9 Cabin Safety Provisions Committee** in January 2013. That committee is also currently working on AS6272, Automatic Fire Extinguisher for Trash Receptacles.

## SAE COUNTERFEIT PARTS STANDARDS WEBCAST AVAILABLE ON DEMAND

The webcast "SAE Standards for Counterfeit Mitigation in Electronics: Which Is Right For You?" is now available for viewing at <http://video.sae.org/11734/>.

Recorded live on October 10, the webcast provides an overview of SAE standards AS5553, AS6081, ARP6178, and AS6171 (in draft), with information on which standards apply to your company, customers and suppliers.

The featured speaker is **Anne Poncheri**, counterfeit electronics parts consultant and Technical Business Unit Manager, Premier Semiconductor Services, LLC. A member of the **SAE G19 Counterfeit Electronic Components Committee**, Poncheri reviews the scope, purpose, and intended certification/accreditations, and implementation requirements of each standard.

SAE International supports the global mobility industry with numerous standards on counterfeit mitigation and avoidance, providing information on how to develop and implement counterfeit control plans. In 2012 alone, SAE released five counterfeit electronics parts risk mitigation standards. These standards, for end-users, suppliers, and testers, are being widely used and accepted in U.S. government circles and the UK defense supply chain.

For more information on SAE's efforts in the area of counterfeit parts mitigation, including all available standards, visit the Counterfeit Parts Portal at <http://counterfeitparts.sae.org/>.

## SAE INTERNATIONAL ACQUIRES TECHAMERICA STANDARDS PROGRAM

In July, SAE International announced the completion of an asset purchase of the TechAmerica Standards Program and IBIS Consortia.

TechAmerica is the leading voice for the Information and Communications Technology (ICT) industry in the United States. Its membership comprises large, medium and small technology companies that create a variety of products and deliver a multitude of services in the private sector and to governments at the state and national level.

"TechAmerica, formally GEIA, has long been a global leader in Systems Engineering, business process, and management standards," said Edward Manns, SAE International's Aerospace Standards Business Unit Leader. "The acquisition of TechAmerica's standards program only enhances SAE International's strong complement of global technical documents."

Through the acquisition, TechAmerica's members will benefit from SAE International's core competency of technical standards and publications development.

### SAE INTERNATIONAL

### 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 harmonized solutions, a full suite of learning resources – including lifelong engineering 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](http://www.sae.org)



### CONSENSUS BASED STANDARDS AND MORE FROM SAE

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

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

## COMMITTEE TO MODERNIZE JET ENGINE BALANCING STANDARD

The **SAE International EG-1A Balancing Committee** is drafting new standards to modernize best practices for the design and use of tooling, fixtures, and accessories that mount and drive gas turbine engine rotors on horizontal and vertical balancing machines.

At its recent working session, the committee drafted wording for "SAE ARP4163: Balancing Machines: Tooling Design Criteria" that will establish new criteria for testing and validating balancing tooling so organizations in aerospace and other industries can balance rotors with greater ease and confidence.

"The current industry standards for rotor balancing tooling were established long before the introduction of new-generation jet engines that feature lighter, faster spinning parts that must be balanced to significantly tighter tolerances," said **George Allen, Chairman of the SAE EG-1A Balancing Committee**. "Since the new standards will have far-reaching impact on any company involved in balancing, we are actively seeking input from companies not currently participating in the EG-1A committee."

The EG-1A committee is comprised of representatives of several jet engine manufacturers, airlines, and maintenance



A jet engine is balanced at the Vibration Solutions North Rotor

repair and overhaul (MRO) companies. Representatives of companies interested in participating in developing the new SAE ARP4163 standard should contact [g.allen@vsnorth.com](mailto:g.allen@vsnorth.com) or 802-253-2036, ext. 103.

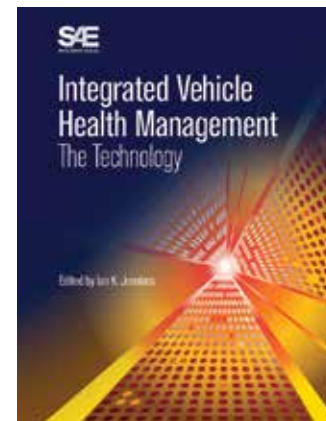
## SAE CONTINUES IVHM EFFORTS WITH BOOKS, STANDARDS

Continuing its groundbreaking efforts in the relatively new field of Integrated Vehicle Health Management (IVHM), SAE International has recently published two books on the subject.

**Integrated Vehicle Health Management: Essential Reading** is a collection of 22 SAE international papers which covers specific areas impacted by the adoption of this new technology, such as engines, airframes, electrical power systems, supporting systems, and architecture. For more information, visit <http://books.sae.org/pt-162>.

**Integrated Vehicle Health Management: The Technology**, features contributions from 28 IVHM experts, providing a hands-on perspective on how to put IVHM to use, and guiding readers through the challenges of making new technologies perform at their maximum potential. For more information, visit <http://books.sae.org/r-429>.

Both books are edited by Ian K. Jennions, Director of the IVHM Center at Cranfield University in the UK. He is a contributing member of SAE's HM-1 Integrated Vehicle Health Management committee, which continues to work on developing standards related to IVHM, and SAE's IVHM Steering Group.



The Integrated Vehicle Health Management committee is currently working on seven standards, which will address the integration of health management systems at both the platform and fleet levels and provide technical standardization to support, guide and advance the realization of IVHM through common definitions, parameters and taxonomy.

## FIRST-EVER GUIDELINES FOR STRUCTURAL HEALTH MONITORING OF COMMERCIAL AIRCRAFT PUBLISHED

SAE International has created the first-ever industry guidelines for Structural Health Monitoring (SHM) of commercial aircraft. "ARP6461 Guidelines for Implementation of Structural Health Monitoring on Fixed Wing Aircraft," was issued by the G11SHM Structural Monitoring and Management committee in September.

The guidelines detail the steps necessary to incorporate built-in sensors on aircraft that can monitor such operating conditions as load and stress, as well as the occurrence and extent of damage. The sensors will enable aircraft operators to improve maintenance practices and streamline inspections.

The publication of this document, the first industry-wide consensus approach to the use of SHM in commercial aircraft, was the culmination of six years' effort from G-11SHM, which was launched by Professor Fu-Kuo Chang of Stanford University under the auspices of the AISC.

"This is a really important development for the SHM community," he said. "We need the input and cooperation from across the industry before SHM can be implemented on aircraft."

The guidelines establish the scope and essential elements of SHM for commercial aircraft maintenance practices. Also included are advice and discussion on requirements and approaches to validation of SHM systems. The document builds on other recent changes to widely used aircraft maintenance guidance such as the A4A (Airlines for America) document, MSG-3.



Intelligent load-monitoring sensor technologies are being developed to detect or calculate the residual fatigue life and structural health of a composite wing. (Fraunhofer Institute)

"These guidelines represent a significant step forward towards reducing the product development risk and enabling SHM technologies to buy their way onto commercial platforms," said Grant Gordon of Honeywell International, the committee's document sponsor responsible for the drafting and technical content approval process.

The committee has started adapting ARP6461 for implementing SHM in military aircraft applications. In addition, a new rotorcraft SHM subgroup was formed. For more information on the committee and its work on the standard, contact David Alexander at [david.alexander@sae.org](mailto:david.alexander@sae.org).



## DELIVERY OPTIONS FOR SAE TECHNICAL STANDARDS

The more than 10,000 standards in the SAE database now include historical standards, and can be accessed through one of the targeted solutions below:

- **SAE Digital Library** is the industry's most comprehensive resource, encompassing 175,000+ technical papers, standards, and related publications from SAE and other renowned organizations. A customizable corporate solution! [digitallibrary.sae.org](http://digitallibrary.sae.org)
- **SAE Subscriptions** are online portfolios of SAE standards or technical papers focused on targeted technologies and industries. [subscriptions.sae.org](http://subscriptions.sae.org)
- **SAE AeroPaks** let you decide how many aerospace standards you need and when you need them. Choose from packages that provide up to 10, 15, 25, 35, or 50 downloads per year. [sae.org/aeropaks](http://sae.org/aeropaks)
- **SAE Aerospace Standards on DVD** provide convenient, portable access to thousands of Aerospace Materials Specifications or Aerospace Standards. Updated quarterly, each DVD also includes a fully-searchable index containing summary information. [store.sae.org/cdstan.htm](http://store.sae.org/cdstan.htm)
- **SAE Aerospace Quality Standards on the Web** aids suppliers in maintaining their aerospace quality management certification with a comprehensive, easy-to-maintain subscription service that provides assistance in navigating the necessary International Aerospace Quality Group (IAQG) documents. [store.sae.org/aeroqa/](http://store.sae.org/aeroqa/)

## SAE AEROSPACE STANDARDS PROMOTED AT PHM SOCIETY CONFERENCE

SAE International's activities in the area of Integrated Vehicle Health Management (IVHM) were discussed at the 2013 PHM (Prognostics and Health Management) Society Conference in New Orleans, August 14-17.

SAE was a sponsor of the event, and David Alexander, Senior Coordinator, SAE Aerospace Standards Europe, presented an update on SAE's IVHM initiative, and SAE's standards in the IVHM

field. Alexander also participated in a PHM panel discussion on the value and use of standards in the PHM industry.

The subject of standardization is important to the PHM Society and the wider PHM industry, and SAE's visible participation in the conference raised awareness about SAE's IVHM standards activities to this community.

## SAE INTERNATIONAL, AEROSPACE ENGINE MAKERS TO WORK TOGETHER ON QUALITY STANDARDS

SAE International's Aerospace Council has announced the launch of a new technical committee known as **G-22 Aerospace Engine Supplier Quality Committee**. The creation of this new technical committee follows initial efforts by GE Aviation, Pratt & Whitney, Rolls-Royce, and Snecma to benchmark supplier quality requirements.

The committee sits under SAE International's Aerospace Council, and participants will include major gas turbine engine makers and their suppliers. Frequent input from government and regulatory agencies is also expected. The goal is to propose a set of common, industry-wide standards that will remove variability and waste, and enable the aerospace supply chain to be leaner and more competitive.

"The creation of the Aerospace Engine Supplier Quality group represents an unprecedented engagement from the major aero engine OEMs in a concerted effort to improve the efficiency of the aerospace supply chain," said Danny Di Perna, Vice President-Operations, Pratt & Whitney.

"Simplifying and improving supplier requirements are a natural fit for GE," said Melissa Twiningdavis, GE Aviation, Sourcing General Manager. "We are developing a record number of new products, and our suppliers must execute flawlessly to meet customer commitments. Standardizing and incorporating best practices into a common specification will facilitate efficiency and quality improvements throughout the production process."

"It is really important to ensure that we put all our suppliers in a position to work as efficiently as possible and not devoting time and effort to non-essential tasks," said Jean-Paul Louis, SAFRAN, Vice President-Manufacturing & Supply Chain.

"Reaching this point is a mark of the importance we all place in driving the quality fundamentals in engine manufacturing," said Alain Michaelis, Rolls-Royce, Group Operations Director. "The work of this group is exciting and will underpin improved supplier quality performance based on common industry requirements."

During its first meeting on July 10-11 in Paris, the group identified four areas of initial focus: problem resolution,



The IAE V2500 engine, of which Rolls-Royce is a major supplier, powers the Airbus A320.

supplier self-release processes, advanced product quality tools, and inspection frequency.

For more information about this new standards committee, please contact Becky DeGutis at [bdegutis@sae.org](mailto:bdegutis@sae.org) or 724-772-4083.

## NEW COMMITTEE WORKING ON RECOMMENDED PRACTICE FOR WAKE VORTEX INFORMATION SYSTEMS

A new SAE International committee, **G-10 Wake Vortex** (G-10WV), is working on an Aerospace Recommended Practice (ARP) document that will provide human factors considerations, design guidelines, and function requirements for Airborne Wake Vortex Information Systems (AWVIS).

Currently in draft form, "ARP6267: Airborne Wake Vortex Safety Systems" will also provide considerations and recommendations for the depiction of the situational awareness aspects of wake vortex information pertinent to the flight crew as well as the depiction of guidance information for avoiding significant wake vortex situations.

The committee began meeting in January 2013. **Chair of the committee is Mikhail Kanevskiy** of International Aerospace Navigation Services (IANS), a Russian company developing a wake vortex system.

Wake vortex encounters can be hazardous to aircraft and passengers. A cockpit display of potential hazardous wake may allow avoidance or mitigation of the hazard. Currently, a range of airborne wake vortex safety systems are being developed within programs developing next generation air navigation systems such as NextGen, SESAR, and the Russian State Program.

In these projects, wake vortex information is proposed to be introduced in the cockpit in a variety of forms. Thus, standardization of this information is needed to ensure the appropriate display of wake vortex information in the cockpit to adequately address issues of workload, situation awareness, training, and information management.

For more information about the G-10WV committee, or to volunteer, contact Kevin Bires at [kbires@sae.org](mailto:kbires@sae.org).

## EXPERTS SOUGHT FOR NEW METALLIC MATERIALS TESTING LABORATORY REQUIREMENTS SUBCOMMITTEE

A new **Metallic Materials Testing Laboratory Requirements Working Group** is being formed to develop a metallic materials testing laboratory requirements standard.

A subcommittee of the **SAE AMS Aerospace Metals Engineering Committee** (AMEC), the group will be responsible for developing and maintaining an industry wide standard for control of metallic materials testing laboratories.

The subcommittee will hold its initial meeting via WebEx in January 2014, with the goals of drafting and balloting a standard in 2014, and publishing the standard in 2015.

The proposed standard is expected to be created in the format of a base specification, along with slash sheets representing separate testing functions such as chemistry, mechanical test, metallography, hardness, and other functions.

Subject matter experts from aerospace industry materials testing laboratories and aerospace manufacturers are requested to volunteer for this subcommittee. To participate, or for more information, contact Laura Feix at [lfeix@sae.org](mailto:lfeix@sae.org).

## COMMITTEE FORMED TO ADDRESS MANUFACTURING MANAGEMENT

A new SAE International committee, G-23 Manufacturing Management, is being formed to develop and publish a standard that documents best manufacturing practices aimed at promoting the timely development, production, modification, fielding, and sustainment of affordable products. The standard is primarily intended for use in the defense industry, but may be applicable to other commercial industries.

The committee will gather government and industry manufacturing experts to develop and publish a standard suitable for use across the defense industrial base. The standard will include requirements that allow maximum flexibility and tailorability in application by a diverse contractor community.

**Committee chair is David M. Karr**, U.S. Air Force.

The Department of Defense identified a need for improvements and standardization in the area of manufacturing management. The Department has 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 Defense Standardization Program Office (DSPO) requested that the Air Force establish a working group to begin developing a draft standard and to select a Standards Developing Organization. In September 2013, the working group recommended and DSPO announced the selection of SAE to develop the standard.

## JOHN C. DALTON, S-18 COMMITTEE CHAIR, RECEIVES COLWELL MEDAL

**John C. Dalton**, Technical Fellow at the Boeing Company, and **Chairman of the SAE S-18 Aircraft and Systems Development and Safety Assessment Committee**, received the SAE International Arch T. Colwell Cooperative Engineering Medal during the SAE 2013 AeroTech Congress and Exhibition, held in Montreal, Canada.

The award recognizes unique and outstanding contributions to the work of SAE technical committees in developing standards, specifications, technical reports, and data through cooperative research.

Mr. Dalton is a member of the SAE Engineering Meetings Board and Chairman of the SAE Air and Space Group. He is the

Editor-in-Chief of the *SAE Aerospace Journal*, and has authored numerous technical publications on the aircraft design safety field. He is a Fellow of SAE International and a Fellow of the Royal Aeronautical Society.

In his present assignment with Boeing, he functions as the Technical Fellow in airplane safety, charged with helping the company to resolve safety issues which require changes in the company's basic policies and procedures. In addition, he works with airlines to improve operational safety in the field.

## E-34 COMMITTEE PAST CHAIR RECEIVES TSB OUTSTANDING ACHIEVEMENT AWARD

**Brian Rayner, the first Chairman of the SAE E-34 Committee**, has received SAE International's Technical Standards Board Outstanding Achievement Award. The award was presented at the E-34 Propulsion Lubricants Committee meeting in Prague, Czech Republic, September 30 – October 2.

This award recognizes individuals for outstanding service in the technical committee activities of the Society. This includes valuable contributions to the work of SAE technical committees, unusual leadership in the activities of an SAE 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 technical committee work in the form of research, test methods and procedures, and/or development of standards.

**Mr. Rayner**, whose outstanding career in the field of aviation gas turbine lubricant technology includes work for Rolls-Royce and Exxon-Mobil, remains active on the **E-34 committee as a member and Task Team Leader**.

### 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)
- 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).

## NOMINATE A DESERVING INDIVIDUAL FOR AN SAE AWARD

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

Submit nominations now as the nomination deadline is **December 31** for the following:

- **Technical Standards Board Outstanding Achievement Award**  
Recognizes outstanding service in the technical committee activities of the Society.
- **SAE Aerospace Chair Award**  
Recognizes outstanding leadership demonstrated by chairs of committees under the Aerospace Council and Air & Space Group.
- **Clarence L. (Kelly) Johnson Aerospace Vehicle Design and Development Award**  
Recognizes those 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. Kolk Air Transportation Progress Award**  
Recognizes contributions to air transportation and/or to the work of the aerospace technical committees in developing standards, specs, technical reports, and data through cooperative research.
- **Marvin Whitlock Award**  
Recognizes significant technical contributions and/or innovation related to operational availability of aircraft.



### And upcoming 2014 nomination deadlines...

- Daniel Guggenheim Medal -- February 1**  
Honors individuals who make notable achievements in the advancement of aeronautics.
- Arch T. Colwell Cooperative Engineering Medal -- July 1**  
Recognizes over a period of time the work of a technical committees in developing standards, specifications, technical reports, and data through cooperative research.

## SAE MEMBER, GSE PIONEER, RECEIVES MAGAZINE'S LIFETIME ACHIEVEMENT AWARD

SAE member Bill Biermann, who retired in 2012 after a six-decade career in the aviation industry, received *Ground Support Worldwide* magazine's Lifetime Achievement Award in March. Biermann was featured on the cover of the June/July 2013 issue of *Ground Support Worldwide*.

The accompanying article described how Biermann joined SAE in the early 1980s and with that built life-long career connections through

participation on standards development committees. Biermann started the committee that developed SAE's first standards on electric ground support equipment (e-GSE). He also worked on SAE standards on chargers for battery-powered ground support equipment and electric equipment.

His career included work at Pan American World Airways, Eastern Airlines, Colonial Airlines, and Charlotte of America.

## SAE STANDARDS DEVELOPMENT COMMITTEES SEEKING EXPERTS AND VOLUNTEERS

The following committees are seeking new members:

- S-7, Flight Deck Handling Qualities Standards for Transport Aircraft
- A-21, Aircraft Noise Monitoring and Noise Aviation Emission Modeling
- SEAT, Aircraft Seat
- ACBG, Airframe Control Bearings Group
- E-25, General Standards for Aerospace and Propulsion Systems

- E-33, In-Flight Propulsion Measurement
- EG-1A, Balancing
- EG-1B, Hand Tools
- S-9, Cabin Safety Provisions
- System Engineering
- XML Data Dictionaries/Documents

If you are interested in participating in these or other SAE standards committees, visit <http://www.sae.org/standardsdev/participateReq.htm>, or contact Kerri Rohall at [kerrir@sae.org](mailto:kerrir@sae.org) or 1-724-772-7161.

## NEW COMMITTEE CHAIRS NAMED

To new and current committee chairs — know that your volunteer efforts are greatly appreciated and the SAE Aerospace Standards Development program thank you for volunteering to lead these committees.

**Ken Sabo**, Lockheed Martin Aeronautics Company, has been named AMS Chair.

**Brian Sova**, The Boeing Company, has been named Chair of the AMS-F Corrosion Heat Resistant Alloys Committee.

**Jeffrey Calcaterra**, U.S. Air Force, has been named Chair of the AMS-G Titanium and Refractory Metals Committee.

**Steve Morris**, Engineering Systems Inc., has been named Chair of the AC-9C Aircraft Icing Technology Committee.

**Ravi Rajamani**, Meggitt PLC, and Alan Lesmerises, Standard Aero Inc., have been named Chair and Vice Chair respectively of the HM-1 Integrated Vehicle Health Management Committee.

**Rhonda Walthall**, UTC Aerospace Systems, has been named Vice Chair of the new IVHM Steering Group.

**Bobby Crumb**, retired from Lockheed Martin, has been named Chair of the AE-8C2 Terminating Devices and Tooling Committee.

**Bill Woodward**, Ursa Navigation Solutions Inc., has been named Chair of the AS-3 Fiber Optics and Applied Photonics Committee.

**Keith Pattison**, Lockheed Martin, has been named Chair of the S-15 Gas Turbine Performance Simulation Nomenclature and Interfaces Committee.

## A-6 COMMITTEE MEETS IN MILWAUKEE

The 154th meeting of the A-6 committee, founded in 1941, took place May 6-9 in Milwaukee, WI. Milwaukee was a fitting site for the Aerospace, Actuation, Control, and Fluid Power Systems committee meeting as it is home to the Fluid Power Institute, the National Fluid Power Association, and the Milwaukee School of Engineering.

The A-6 agenda is centered on the activities related to transforming relevant information into knowledge that can be incorporated into aerospace documents. Meeting activities are based on the steps necessary for this transformation and are centered on the concepts of: sharing, producing, and approving. Highlights included:

- Symposium on “Advances in Fluid Power Systems”
- A tour of the hydraulic research labs of the Fluid Power Institute, at The Milwaukee School of Engineering
- Document working sessions
- Panel meetings
- A-6 general meeting

The meeting had an international attendance of 130 industry experts including aircraft manufacturers, system designers, component manufacturers, airworthiness authorities, government and military representatives, airline operators and maintainers, and industry consultants.



The Fluid Power Institute conducts hydraulic research and testing for commercial and government customers. (Milwaukee School of Engineering)

The symposium, “Advances in Fluid Power Systems,” included 13 presentations from both students and professors. It covered seals, leakage reduction, low-friction surface texturing, several student competitions, as well as presentations by the National Fluid Power Association (NFPA), Center for Compact and Efficient Fluid Power, and Milwaukee School of Engineering (MSOE). Sam Miller, a student at MSOE, was judged to be the best presenter.

A fall A-6 meeting was also held this past September in Boulder, CO, and included three planned training classes on: Electrohydraulic Servo Valves; Tubing Systems; and “Electrohydrostatic Actuators.”

## AEROSPACE TECHNICAL COMMITTEE MEETING SCHEDULE

This list is current as of publication. For updates and changes, go to <http://www.sae.org/standards/aerospace/schedule>.

January 14-15	Registration Management Committee (RMC) Meeting, Palm Beach, FL, USA
January 16	RMC Other Party Assessor Workshop, Palm Beach, FL, USA
January 20-24	S-18 Aircraft and Systems Development and Safety Assessment Committee, Jacksonville, FL, USA
January 21-22	APMC, Avionics Process Management, Phoenix, AZ, USA
January 27-30	G-10 Aerospace Behavioral Engineering Technology / A-4 Aircraft Instruments Committee, Melbourne, FL, USA
January 27-28	AMEC Surface Enhancement Committee, Monterey, CA, USA
January 27-31	AMS CACRC Commercial Aircraft Composite Repair Committee, Burbank, CA, USA
January 28-30	AE-2 Lightning Committee, Phoenix, AZ, USA
January 29-31	AMEC Aerospace Metals and Engineering Committee, Pacific Grove, CA, USA
February 17-18	A-20 Aircraft Lighting Committee, Honolulu, HI, USA
February 19-21	Aircraft Seat Committee, Honolulu, HI, USA
February 25-27	S-16, Turbine Engine Inlet Flow Distortion, Salt Lake City, UT, USA
March 4	AE-8 Executive Committee, San Antonio, TX, USA
March 4-6	E-36, Electronic Engine Controls, San Antonio, TX, USA
March 12-14	G-3, Aerospace Couplings, Fittings, Hose and Tubing Assemblies, San Antonio, TX, USA
March 24-27	AMS Metals Group Committee Meeting, Jacksonville, FL, USA
March 24	AMS K - Non destructive methods & processes magnetic particle & penetrant methods TF, Minneapolis, MN, USA
March 24-26	E-34, Propulsion Lubricants, Alexandria, VA, USA
March 25-27	SAE AE-7A / EUROCAE Fuel Cell Task Group, Bishops Cleeve, United Kingdom
March 27	AMS M, Aerospace Greases Committee Meeting, Alexandria, VA, USA
April 1-2	AGE-2A Cargo Handling, Cologne, Germany
April 1-3	G-11 Reliability, Maintainability, Supportability and Logistics Division, Savannah, GA, USA
April 1-3	HM-1 Intergrated Vehicle Health Management, Savannah, GA, USA
April 1-2	S-15, Gas Turbine Performance Simulation Nomenclature and Interfaces, Boston, MA, USA
April 7-10	International Aerospace Quality Group (IAQG) - Brussels, Brussels, Belgium
April 7-10	IAQG Dinner Event - Thursday Evening, Brussels, Belgium
April 7-10	IAQG Team Meetings, Brussels, Belgium
April 7-9	E-25, General Standards for Aerospace and Propulsion Systems, Philadelphia, PA, USA
April 8-10	E-32, Aerospace Propulsion Systems Health Management (Hosted by Howell Instruments), Fort Worth, TX, USA
April 14-17	Avionic Systems Group Committees (AS-1, AS-2, AS-3), Santa Barbara, CA, USA
April 15-17	A-5 Aerospace Landing Gear Systems Committee, Savannah, GA, USA
April 15-17	ACBG - Airframe Control Bearings Group, Savannah, GA, USA
April 15-17	AE-8A Systems Installation and AE-8D Wire & Cable Committees, St Louis, MO, USA
April 28 - May 1	G-8, Organic Coatings and G-9, Aerospace Sealants, Savannah, GA, USA
April 28 - May 2	S-18 Aircraft and Systems Development and Safety Assessment Committee, Rosemount, IL, USA
April 29 - May 2	S-9 Cabin Safety Provisions Committee, Atlanta, GA, USA

## 2013 DOCUMENT PUBLICATION

(through Dec 1)

Document Publication Status	Number Published Jan-Dec 2013
Issued	86
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Cancelled	7
Stabilized	167

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### Aerospace standards committees meet at AeroTech Conference

The Aerospace Council and nearly 20 aerospace standards committees met during the 2013 SAE AeroTech Congress and Exhibition, held September 24-16 in Montreal.

The SAE Standards Program employs various forms of technology such as online forums and web-based software to manage document creation and facilitate worldwide access and discussion of global standards development in a timely manner.

Yet, nothing beats face-to-face meetings and the multiple committee meetings held during AeroTech enabled committee members as well as members of different committees to interact with each other in one location and to participate in the conference's technical sessions.

The 2015 AeroTech Congress is scheduled for September 22-25, 2015, in Seattle, Washington, USA.

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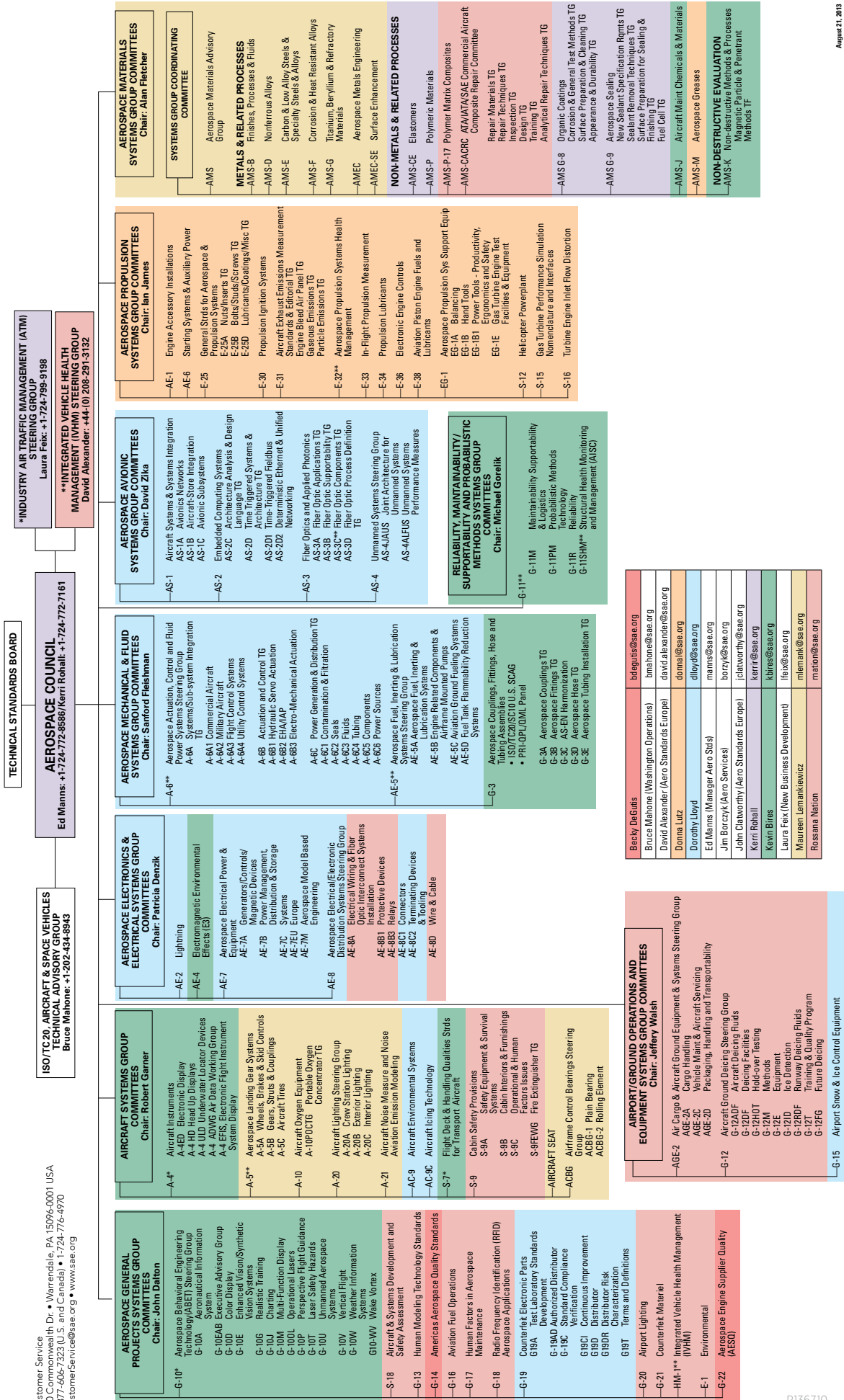


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