

Fall Issue 2012

October

SAE 2012 AEROSPACE ELECTRONICS AND AVIONICS SYSTEMS CONFERENCE

October 30 - November 1, 2012 • Phoenix, Arizona, USA

www.sae.org/events/aeas/

Avionic Systems Group

It's Here! The Inaugural

SAE Aerospace Electronics and Avionics Systems Conference

Thanks to the SAE staff for putting together another great conference. Special thanks to Joan Hudson and Jim Sherman for their coordination and planning over the last year to make this happen. I'm sure there will be a few glitches, but we will work through them and have an even better conference in 2014. I want to also thank all of the Technical Committees meeting in conjunction with the conference. I know it is a lot of extra work and effort to keep the committee meetings and work going with the distraction of the conference. Every effort has been made by SAE and the planning committee to keep the interference to a minimum.

Regards,
David Zika
ASG Division Chair
AEAS Technical Program Co-Chair

100 Years Ago in Aerospace

One hundred years ago, on August 16, 1912, Glenn L. Martin established the Glenn L. Martin Company in Los Angeles, California. He started the company after building his first plane in a rented church, where he took a leap of faith on his risky but innovative new aircraft design at the urging of none other than Orville Wright.

Inside this issue:

AS-1 Aircraft Systems & System Integration	2
AS-3 Fiber Optics and Applied Photonics	8
AS-4 Unmanned Systems	11
AS-4 Unmanned Systems	10
Spring 2013 Meeting Announcement	12
Fall 2013 Meeting Announcement	13
Contact Us	Back Cover
Future Meetings	Back Cover



A Publication of the SAE Aerospace Avionic
Systems Group - SAE International © 2012

SAE International

SAE Aerospace Avionic Systems Group

AS-1 Steering Group

Chair - Dave Neel – Lockheed Martin
Vice-Chair – Robert Boman – Lockheed Martin
Secretary - TBD -

AS-1 Provides avionics standards in the field of aircraft systems and systems integration. AS-1 comprises three committees:

AS-1A Avionics networks

AS-1B Aircraft-Store Integration

AS-1C Avionic Systems and Subsystems.

The AS-1 committees have fourteen active projects within the various task groups.

AS-1 held its Summer meeting at Cambridge, England in July with MBDA acting as our host. AS-1A did not meet and AS-1C chose to have their meetings at the SAE headquarters in Warrendale, PA. The AS-1B Task Groups made great progress on their projects and everyone enjoyed the Cambridge University ambiance.



Cambridge Christ College Campus

Cambridge was the last meeting for two of our long time members as they move into retirement. Mr. Pierre Miles, from MBDA, and our host for the summer meeting, joined SAE in September 2001 at our meeting in Seattle. Mr. Miles contributed to multiple SAE Standards, was the Secretary and Vice Chair for multiple AS-1 Task Groups as well as the AS-1 Steering Committee. In addition, he participated in SAE/NATO Collaboration through multiple NIAG Studies. In 2006, Mr. Miles received the SAE Technical Standards Board Outstanding Contribution Award for his contributions to SAE.



Mr. Miles receiving his AS-1 Commemorative Beer Stein

Mr. Scott Millet, from the US Navy, joined SAE in January 2000. Mr. Millet also contributed to Multiple SAE Standards, was the principal author and maintainer of MIL-STD-3014 Mission Data Exchange Format standard, was a Liaison between US Navy and AS-1 Steering Committee and participated in SAE/NATO Collaboration through multiple NIAG Studies. Mr. Millet received the Technical Standards Board Outstanding Contribution Award in 2008.



Mr. Millet receiving his AS-1 Commemorative Beer Stein

The members of AS-1 wish Mr. Miles and Mr. Millet as much success in their retirement as they had in their participation with SAE.

AS-1A Avionics Networks

Chair - Sam Lassini – GE
Vice Chair – Gary Warden

The AS-1A1 1553 & Derivations Task Group, AS-1A3 MIL-1394 Task Group, AS-1A4 High Performance 1553, have gone inactive after completion of their latest projects. AS-1A5 IEEE 1393 Ring Network for Aerospace Applications Task Group has gone inactive due to funding limitations.

Currently, only one task group is meeting under the AS-1A committee, AS-1A2. As required, AS-1A performs Committee level review of current and past AS-1A documents to ensure compliance with SAE document maintenance guidelines. Current AS-1A2 tasking includes the development of rev. A of AS5653 as well as the corresponding validation documents.

AS-1A2 High Speed 1760

Chair - Sam Lassini – GE
Vice Chair – Gary Warden

The newest revision of AS5653A High Speed Network for MIL-STD-1760 has been balloted and approved. It is available for implementation as is evidenced by some recent commercial products now offered as Commercial-Off-The-Shelf (COTS) products.

The newly balloted and approved AS5653A standard defines a switch that meets mixed mode critical systems requirements in that it can handle high-bandwidth lower priority traffic on the same physical links as low-latency higher-priority traffic without either bandwidth stream affecting the performance of the other outside a very well-known deterministic latency boundary. And it does this without ever dropping data due to congestion. Furthermore, the systems-architect's burden in the design process is reduced due to the HS1760 network being essentially a plug and play environment. The system-architect only has to be concerned with the overall bandwidth assigned to any given physical link, not how the individual data flows are managed. Asynchronous data is scheduled by default as lower priority traffic along with the high-bandwidth traffic where latency is not as important as bandwidth utilization.

Components of this system will include a HS1760 compliant switch, a network controller, and network terminals as end-devices. One essential piece for a laboratory environment is an SFP (Small Form-Factor Pluggable) module, Figure 1, that implements the physical layer of the network. It operates at the 1.0625 gigabaud frequency and the AS5653A output voltage levels to guarantee reliable transmission over 100 feet of

75 ohm single ended coax with up to five connectors between the two end-devices being connected. Figure 2 is an example of a product that implements a HS1760 compliant 6-port switch as well as an embedded network controller.



Figure 1 - Small Form-Factor Pluggable module



Figure 2 - HS1760 compliant 6-port switch

In parallel with the development of AS5653A, AS-1A2 is working on the validation documents for the three main components of an AS5653A network: The Network Controller (NC), Network Terminal (NT), and Switch (SW). The validation documents are being written against the AS5653A draft and will be fully synchronized with rev. A of the standard when they are issued.

AS-1B Aircraft-Store Integration

AS-1B Committee

Chair - Rick Wild – Lockheed Martin
Vice Chair – Alan White – Lockheed Martin

AS-1B1 – Micro Munitions Interface Task Group

Chair - Sam Lassini - GE
Vice Chair - TBD
Secretary – Dixie Branch – Northrop-Grumman

AS-1B1 continues the maintenance of AS5726, Interface for Micro Munitions, and is compiling a working draft with errata items as well as additional clarifications and expansions of some technical aspects of the standard, in particular in the area of power specification.

In the process of maintaining AS5726, the Task Group is developing explanatory material on the intended use of features of AS5726 as well as initial lessons learned from lab and field trials that will be compiled in a handbook, scheduled to be released concurrently with the upcoming rev A of AS5726.

AS-1B1 also continues to work jointly with AS-1B2 to develop a suite of validation documents for all three primary weapon interface standards (MIL-STD-1760, AS5725, AS5726).

Participation in AS-1B1 remains quite active and members of the weapon interface community are strongly encouraged to attend.

AS-1B2: Aircraft/Store Interface Standards Users Group

Joseph P. Cammarota – Raytheon
Vice Chair – Fred Benedick – WINTEC
Secretary – Dave Noa – ITT Corporation

The Aircraft/Store Interface Standards User Group supports the MIL-STD-1760 aircraft/store interface standard and the SAE AS5725 Miniature Mission Store Interface (MMSI) standard. This includes work on validation documents for interface implementations and development of working drafts for suggested revisions to the standards, as well as providing a forum for discussing implementation issues and sharing lessons learned. The Common Launch Acceptability Region Approach

(CLARA) documents previously developed by the AS-1B5 group have been stabilized by the group and should not require updates in the future.

The group is continuing the effort toward defining a Fiber Optic interface capability for MIL-STD-1760 (using currently reserved Fiber Optic contact spaces), and the group will be working with AS-3 and AE-8 to ensure that an approach which can be implemented with interchangeable, suitable and reliable components is defined and incorporated into the 1760E working draft.

Work on validation documents for MIL-STD-1760E aircraft and store interfaces and for AS5725 carriage and store interfaces is continuing. Evolving documents which will incorporate this work include: AS47643 - Validation Methods for MIL-STD-1760E Aircraft Station Interfaces, AS42702 - Validation Methods for MIL-STD-1760E Mission Stores, AS5748 - Validation Methods for AS5725 Miniature Mission Store Interfaces, and AS5749 - Validation Methods for AS5725 Miniature Store Carriage Interfaces. Joint working sessions are being held with the AS-1B1 Micro Munitions Interface Task Group, to efficiently address test/validation considerations that are common across the range of MIL-STD-1760, MMSI, and IMM interfaces.

A MIL-STD-1760E Working Draft is being maintained to reflect changes and additions recommended by the group for the next revision of MIL-STD-1760. The group additionally plans to provide recommended changes and additions to the existing MIL-HDBK-1760 document to bring it up to date with MIL-STD-1760E.

AS-1B3: Aircraft-Store Systems Integration Task Group

Chair - Herbert Schlatt - Cassidian
Vice Chair – TBD -
Secretary – Robert Boman – Lockheed Martin

The Aircraft-Store Systems Integration Task Group works to develop and document methods for increasing interoperability of aircraft/stores, at the avionic systems level. Its activities include assisting the standardization and implementation of 'Plug and Play' principles for aircraft and stores.

The support to MiDEF (MIL-STD-3014) continues. The custodian of the standard seeks advice from the group when changes and additions to the data registry are proposed. These are discussed during the group meetings and recommendations made to the custodian.

AS-1B Aircraft-Store Integration (cont.)

The group passed the SAE Aerospace Council ballot for the document AIR 6027 "Considerations for Safe Store Operation on Manned and Unmanned Vehicles". The AIR was published in May. The main results of this document have been presented to the JAUS/AS-4 committee at the SAE ASD meeting in Minneapolis.

The committee commenced the work on an update of AS6030 based upon lessons learned from a NATO activity to define a "System Interface Control Plan".

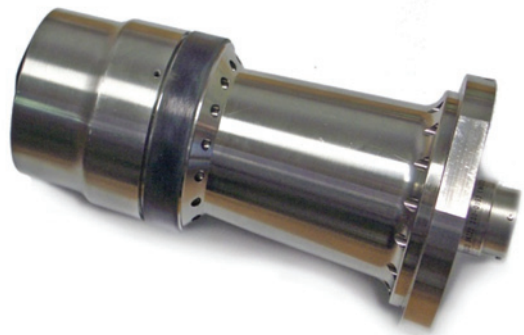
As part of the SAE documents re-affirmation process, the group started an update of AS5609 Platform/Store Common Interface Control Document Format. It will correct some issues and incorporate UML notation examples in the functional section of the document.

The meeting in Cambridge in July was the last for the group's vice chair P. Miles and the long time MIL-STD-3014 author and custodian S. Millett, who both retired before the fall meeting. The group would like to thank P. Miles for acting as its vice-chair since the fall 2003 and S. Millet for bringing an interesting task to the group. Their valuable and active contributions were an integral part to bring the group's tasks forward will be well remembered and, their outstanding work will be missed.

interchangeability of fuzing system(s) within weapons. The group has now completed a major effort to update the standard to AS 5716A, addressing the interchangeability of the main fuze "can" element.

This document completed a 28 day ballot in July 2012. Technical issues were noted during this process, which were addressed in the last group meeting held in July in Cambridge UK. The revised document is planned to be re-balloted through the 14 day ballot process in October and then passed to the Aerospace council for approval.

The task group now plans to start defining the validation specification. This is good opportunity for new members with fuzing or validation experience to join the group.



Example AS5716 Compliant Fuze Can

AS-1B5 – Common Launch Acceptability Region Task Group

Inactive

AS-1B6 – Fuze Systems Task Group

Chair - Richard Clutterbuck
Vice Chair –TBD - MBDA
Secretary - TBD

The Fuze Systems Task Group was formed to support interoperability and interchangeability of airborne weapons

and their fuzing systems. This effort was initiated in response to a request made to the SAE AS-1 Technical Committee by the North Atlantic Treaty Organization (NATO) Air Armament Panel for AS-1 to undertake a study or series of studies related to airborne weapons fuzing system standardization.

The Group is responsible for AS5716, "Standard Electrical and Logical Interface for Airborne Fuzing Systems". The first issue of this document was published in February 2010 and defined a standard electrical, logical and functional interface that supports the

AS-1B7 – Fuze Mechanical Task Group

Inactive



AS-1C Avionic Systems and Subsystems

AS-1C Committee Status

Chair – John Park – Lockheed Martin
Vice-Chair – Michael G. Block - Navy

The AS-1C Committee is working to develop interface standards between platforms and their EO/IR sensors. There are four groups established to develop the interface standards:

The AS-1C1 EO/IR Signal Sets Task Group was formed to address the electrical interfaces.

The AS-1C2 EO/IR Sensor System Maintenance and Test Interface Task Group was formed to address the maintenance and test interfaces.

The AS-1C3 EO/IR Mission Avionics Data Exchange Task Group was formed to address the areas of command and control and sensor data exchange (format and content).

The AS-1C4 EO/IR Mechanical / Environmental Interface Task Group was formed to address the mechanical interfaces.

Since the group formation, we have released the following for ballot: AS6129 (EO/IR electrical interface), AS6135 (EO/IR data exchange interface), AS6165 (EO/IR maintenance and test interface), and AS6169 (mechanical interface). AS6135 has since been approved by the Aerospace Council. AS6129 is being re-balloted based on incorporation of comments received during initial ballot. AS6165 and AS6169 are both being balloted for the first time.

AS-1C1 – EO/IR Signal Sets Task Group

Chair - John Park
Vice-Chair – Michael G. Block
Secretary – Mike Perry

AS-1C1 task group is working to standardize the EO/IR sensor electrical and physical interfaces that facilitate the transfer of power, sensor data, command and control and safety signals needed for future EO/IR sensor systems.

The AS-6129 draft was submitted for balloting on 11 January, 2012. Although the number of participants voting was high, the draft did not obtain sufficient approvals for passage.

The AS-1C1 task group has been working since then to resolve all the comments received during initial

balloting. The task group last met at its quarterly meeting August 7 at SAE headquarters in Warrendale, PA. The task group has been able to resolve the majority of the comments to date and are now working on closing remaining open action items: any inconsistencies in the document, resolving voltage levels for logic 1 and 0, defining whether we need open or closed circuits for determining safe state, resolving comments related to video and fiber channels, and document clean up. AS6129 is currently being re-balloted.

AS-1C2 – EO/IR Sensor System Maintenance and Test Interface Task Group

Chair – Harvey Sokoloff
Vice-Chair – Vicente Mahoney
Secretary – Mike Perry

The task group met at its quarterly meeting August 8 at SAE headquarters in Warrendale, PA. The last remaining technical concerns were addressed by the group. These were a) agreeing on a methodology for transfer of data files to and from a sensor during maintenance and test, b) methodology for entering and exiting a Maintenance Mode and establishing control authority of the sensor during maintenance and c) the use of safety discretes. The agreement along with the detailed write ups for the relevant sections of the draft standard has been completed. The draft of AS6165 underwent final edits and was submitted for ballot on 4 September 2012.

AS-1C3 – EO/IR Mission Avionics Data Exchange Task Group

Chair – Robert Schoenberger
Vice-Chair – Cary Jaikaran
Secretary – Gary Thom

AS-1C3 task group is chartered to identify, define and standardize protocols and data exchanges for airborne EO/IR sensor to platform interfaces needed for future EO/IR sensor systems.

AS-1C3 Officers and its many active task group members, and the members of AS-1C who assisted with voting and comments are pleased to announce that **AS6135, “Interface Standard, Airborne EO/IR Systems, Data”, was approved by the Aerospace Council as of midnight August 21, 2012.** Multiple task group members are actively working on getting AS6135 to be adopted by a number of types of aircraft. Task group

AS-1C Avionic Systems and Subsystems (cont.)

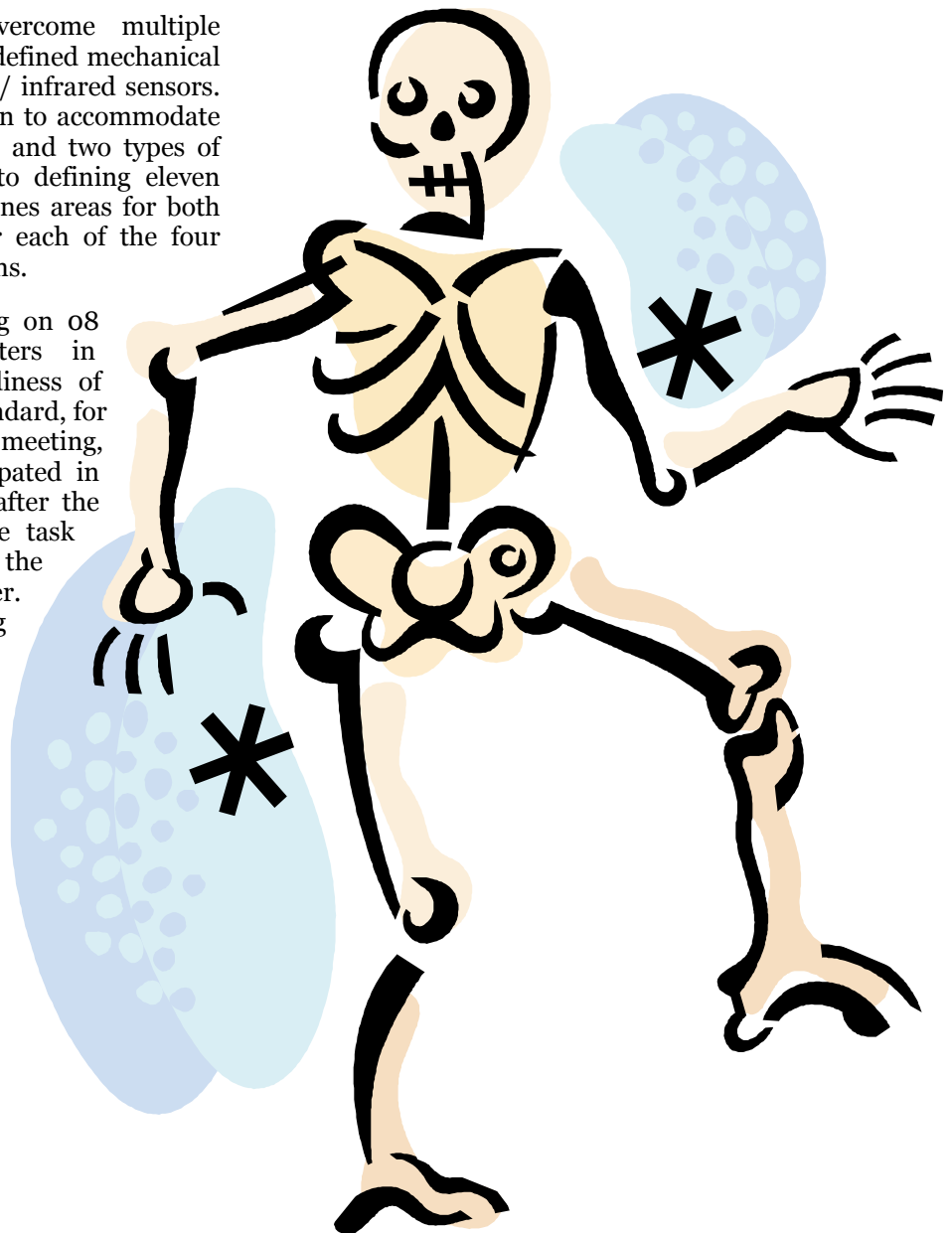
members are also working on finding a way to create a test-bed and perhaps flying a demo to test and demonstrate AS6135 as well as the other interfaces between the platform and its EO/IR sensor(s). A test spec and plan are also likely future activities.

AS-1C4 – EO/IR Mechanical/Environmental Interface Task Group

Chair – Mike Mozzo
Vice-Chair – John Miller
Secretary – Mike Perry

The AS-1C4 Task Group has overcome multiple challenges in coming up with clearly defined mechanical interfaces for turreted electro-optical / infrared sensors. Eleven designs have been agreed upon to accommodate turrets that span four weight classes and two types of egress configurations. In addition to defining eleven mechanical designs, AS6169 also defines areas for both electrical and cooling connectors for each of the four weight classes and egress configurations.

AS-1C4 met for its Summer Meeting on 08 August 2012 at SAE Headquarters in Warrendale, PA. to assess the readiness of AS6169, the Mechanical Interface Standard, for balloting. In addition to the summer meeting, the AS-1C4 Task Group also participated in multiple WebEx's, both before and after the summer meeting. The goal for the task group was to submit AS6169 prior to the Fall SAE AS-1C Meeting in late October. This was accomplished by sending AS6169 to ballot on 4 September 2012.



AS-3 Fiber Optics and Applied Photonics



AS-3 Chairperson
Christopher Winslow

AS-3 Chairman's Corner

For 2012, AS-3 continues to have a significant number of projects in work. As we did last year, we scheduled interim meetings in the spring and summer to help focus on some of our key activities.

With so many projects in work, AS-3 has a full agenda planned for the fall 2012 meeting. One thing that I would like everyone to keep in mind, however, is that since we will be meeting in con-

junction with the 2012 Aerospace Electronics and Avionics Systems (AEAS) Conference we have decided to sponsor a day for fiber optic papers on Wednesday October 31st. This means that our normal Wednesday and Thursday activities will be shifted to Thursday and Friday respectively. Please see the SAE web site for the updated schedules.

One of the key projects I would like to highlight this time is a joint project between AS-3 and AE-8C1. The document we are collaborating on is AS5591 – Fiber Optic Terminus Standard. This important new standard will finally give the SAE full control over all aspects of the components used in fiber optic interconnects. It will also give us a home for the expanded beam contacts that look to be an enabling technology for a number of emerging applications.

Of course, we also published some new standards this year that were the result of countless hours of effort by our members. First AS5675 *Characterization and Requirements for New Avionic Fiber Optic Cable Assemblies - Jumpers, End Face Geometry, Link Loss Measurement, and Inspection* was finally published. This was the culmination of the efforts of several members and great support from the SAE staff in getting the final formatting completed. This document gives the aerospace industry guidance on fiber optic termination inspection and testing. I have already used AS5675 myself and suspect that many of you will as well.

The second key standard that we published so far this year was AIR6031 *Fiber Optic Cleaning*. With this document we captured the latest industry best practices, as well latest cleaning materials and devices. This is going to be a document that will require frequent updates as

the science of cleaning fiber optic terminations continues to advance, but it presently captures the state of the art and should be required reading for anyone working around fiber optics.

On a personal note, this will be my last Chairman's Corner. At the conclusion of the fall meeting this year, I will have completed my second 3 year term as the chairman of AS-3 and will be stepping down to allow a new slate of officers to take over. I have been fortunate to have been the chair of AS-3 during a great time for both the fiber optics industry and for AS-3. During my 6 years as the chair, we created a strong library of aerospace specific documents on everything from RF over Fiber to Technician Training and Certification. When I attended my first AS-3 meeting in 2001, those of us in the aerospace industry were largely dependent on old shipboard standards (or no standards at all) to guide us in implementing fiber optics on the next generation of military and commercial aircraft. Today, AS-3's vast document library of aerospace specific standards is available to anyone as a resource containing the collective knowledge of the industry's leading fiber optics system and component designers, manufacturers and users. As the committee transitions to new leadership, I am confident that AS-3 will continue to expand that library and update it as necessary as fiber optics in aerospace continues to evolve.

It has truly been a pleasure to have served as an officer of AS-3 for the last 12 years. I would like to express my sincere thanks to all of the members of AS-3 and our SAE staff for all of the hard work and support.

Chris



AS-3 Fiber Optics and Applied Photonics (cont.)

AS-3C1 responds to the Need for Single-mode Opti-



cal Fiber on Aerospace Plat- forms

The Emerging Passive Optical and Interconnect Technologies Working Group AS-3C1 continues to respond to the need for single-mode optical fiber on aerospace platforms with the Expanded Beam User Guide, ARP6112. This document focuses on the design considerations for selecting expanded beam fiber optic interconnects. It is intended to aid engineers in the selection of these interconnects and related components. There is so

much interest from industry in this standard that additional working sessions are required. Twenty people attended a two-day working session lead by

Rick Jones and hosted by COTSWORKS at the Cleveland Public Library in Ohio.

A tremendous amount of planning and coordination between the attendees and the sponsor is required to host a successful ad-hoc meeting of this size.

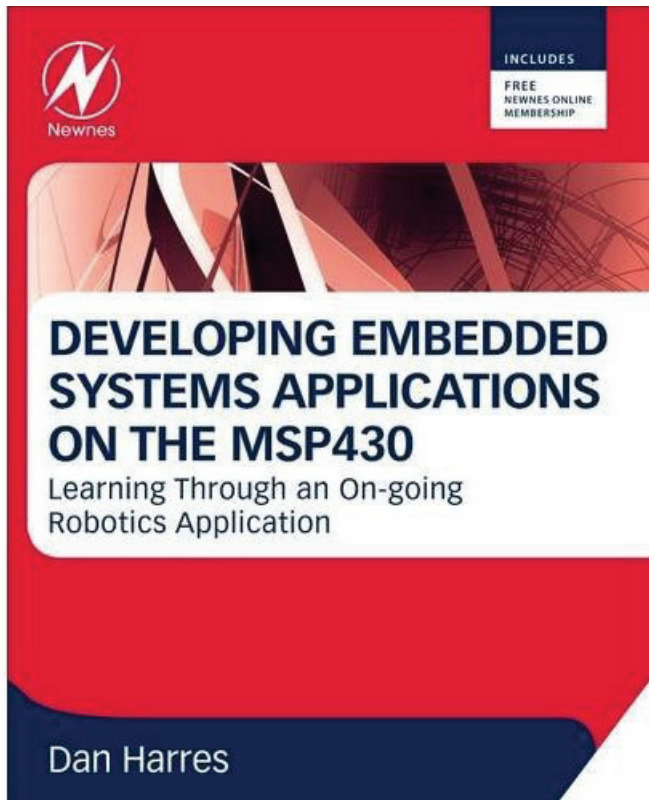


Lindy Anthony from COTSWORKS coordinated this very successful event attended by subject matter experts from around the world. The work accomplished at this meeting will continue at the ASG Avionic Systems Group Committee Meetings in

AS-3 Fiber Optics and Applied Photonics (cont.)

Retirement Means: Now There is Time to Write a Book

For several decades, Dan Harres contributed his engineering expertise to various SAE projects. He recently retired after 36 combined years with ITT Electro-Optics Corp, McDonnell Douglas Corp, and Boeing Company. As an inventor, Dan holds 29 US patents and patents pending. He has authored roughly 30 technical magazine articles and conference papers, and chaired the IEEE



Avionics, Fiber Optics, and Photonics Conference in 2009-10. His principal areas of expertise are analog circuit design, microcontroller applications, and fiber optics system design.

For some retirement is an opportunity to relax. However, for Dan retirement is an opportunity explore new projects and share his subject matter expertise in the form of a book. His latest project entitled "MSP430-based Robot Applications: A Guide to Developing Embedded Systems" is set to be released in March. This book details the basic areas of electronics and computer architecture for robotic applications. It features many examples that demonstrate the interface design, sensor design, and programming concepts necessary for embedded robotic systems. Written for an audience with no mechanical

knowledge of robots, the book starts by demonstrating how to modify a simple radio-controlled car to create a basic robot.

AS-3 Education Efforts Took Center Stage at the Department of Defense Worldwide Education Symposium

Bill Woodward, AS-3 vice chair hosted an hour-long session with a presentation entitled Meeting Evolving Technology Education Challenges at the Department of Defense Worldwide Education Symposium. His presentation focused on how the needs of the United States Military and, indeed, most of the world are highly dependent on the supply of trained personnel to install, operate, and maintain emerging technologies. It discussed how the rapid evolution of technology places great challenges on educators to train and certify personnel in these technologies in a timely way and how cooperative efforts between SAE International, ARINC, and the Electronics Technicians Association, International (ETA) have pioneered a new approach to meet the challenges of evolving technology education.



AS-4 Unmanned Systems

AS-4 Chair—Mark Hinton

In response to a preference ballot in the General Session of the Spring AS4 meeting, the Fall meeting of AS4 is being held in conjunction with the Unmanned Systems Interoperability Conference, sponsored by AUVSI, and held in San Diego. The Fall meeting will be Monday, October 29, immediately preceding the Conference.

Committee AS-4A (Architecture Framework) moved AIR5664A, "JAUS History and Domain Model" to stabilized status on August 16, 2012. The committee continues to work towards a second revision (Revision B) of AIR5665, "Architecture Framework for Unmanned Systems (AFUS)."

considerations related to defined JAUS transports or the mapping of those considerations onto DDS. AS6091 "JAUS Unmanned Ground Vehicle Service Set" was recently balloted, and the committee is working to address all of the comments during this process. Finally, work continues on AS6063 "JAUS USV Service Set", and AS6132 "JAUS Payload Interface Service Set".

Committee AS-4D, Unmanned Systems Performance Measures, announces that the unmanned systems terminology document ARP6128, "Unmanned Systems Terminology Based on the ALFUS Framework," passed Committee ballot.



AS-4B, the Network Environment Committee, is currently investigating a potential new JAUS data distribution approach in conjunction with AS-4C. This effort is discussed in the AS-4C section, below.

The AS-4C Information Modeling and Definition Committee is currently working on eight documents. Two of these documents deal with defining services for world modeling. These documents are ARP6083 "JAUS World Modeling Service Recommended Practices" and AS6084 "JAUS World Modeling Service Set." Two additional AS-4C works-in-progress address UUV requirements. The first is a revision of AS6009 "JAUS Mobility Service Set" and the second is AS6111 "JAUS Unmanned Underwater Vehicle Service Set". The latest AS-4C document is ARP6227 "JAUS Messaging over the OMG Data Distribution Service (DDS)". This document defines a mapping of the AS5684 JSIDL message set and typeset schema elements to OMG Interface Definition Language (IDL) used by the OMG Data Distribution Service (DDS) standard. This document does not address transport



ASG Spring 2013 Meeting Announcement

SAE Aerospace Avionic Systems Group Committee Meetings

Jacksonville, Florida USA,
April 22-25, 2013

Hyatt Regency Jacksonville Riverfront

225 East Coastline Drive

Jacksonville, Florida 32202

Phone: 904-588-1234

<http://jacksonville.hyatt.com/hyatt/hotels/index.jsp?null>

The Hyatt Regency downtown Jacksonville hotel is situated on a four-mile riverfront boardwalk close to area attractions.

Hotel Reservations:

A block of sleeping rooms is reserved at the hotel for attendees of this meeting. The room rate is \$155.00 per room night single or double, plus taxes. Rate includes complimentary internet in the sleeping room. Government per diem rooms are available with government id. These rooms are on a first come, first serve basis. To make your reservations, [please click here](#). If you need additional assistance, please call 888-421-1442.

For questions regarding hotel amenities and general services, you may call 904-588-1234.

The cutoff date for making reservations at the group rate is [Monday, April 8, 2013](#).

Registration Information:

We ask all attendees to pre-register for this meeting. The registration information significantly helps us in preparations for the meetings. A name badge will be available at the SAE Registration Desk at the hotel only if you pre-register.

The pre-registration fee is \$175 and late registration (after 4/08/13) is \$210. Please complete the registration form on the previous screen. For all questions concerning registration or to register over the phone, please contact SAE Customer Service at 1-877-606-7323 (1-724-776-4970 outside the U.S. and Canada) or email: customerservice@sae.org.

Meeting Schedule/Agendas:

A meeting schedule and agendas will be posted on the committee website when available.

ASG Fall 2013 Meeting Announcement

SAE Aerospace Avionic Systems Group Committee Meetings

Portland, Maine USA,
October 21-24, 2013

Doubletree by Hilton Hotel

363 Main Mall Road

Portland, ME 04106

Phone: 207-775-6161

<http://doubletree3.hilton.com/en/hotels/maine/doubletree-by-hilton-hotel-portland-me-PWMMMDT/index.html>

Enjoy a convenient location just two miles from Portland International Jetport and five miles from downtown Portland, ME. Visit New England's largest mall, The Maine Mall right across from the hotel and dine in your choice of restaurants within walking distance of the hotel.

Hotel Reservations:

A block of sleeping rooms is reserved at the hotel for attendees of this meeting. The room rate is \$139.00 per room night single or double, plus taxes. Rate includes complimentary internet in the sleeping room. Government per diem rooms are available with government id. These rooms are on a first come, first serve basis. To make reservations, contact the hotel directly and ask for the **SAE International ASG Committee Meeting** room block. The cutoff date for making reservations at the group rate is **Friday, October 4, 2013.**

Registration Information:

We ask all attendees to pre-register for this meeting. The registration information significantly helps us in preparations for the meetings. A name badge will be available at the SAE Registration Desk at the hotel only if you pre-register.

The pre-registration fee is \$175 and late registration (after 10/04/13) is \$210. Please complete the registration form on the previous screen. For all questions concerning registration or to register over the phone, please contact SAE Customer Service at 1-877-606-7323 (1-724-776-4970 outside the U.S. and Canada) or email: customerservice@sae.org.

Meeting Schedule/Agendas:

A meeting schedule and agendas will be posted on the committee website when available.

Name: _____

Company: _____

Phone: _____

email: _____

Name: _____

Company: _____

Phone: _____

email: _____

[illegible]

Contact Us

Visit the SAE website at www.sae.org.

Visit the SAE Aerospace ASG public pages at

www.sae.org/standardsdev/aerospace/aasd.htm

Dorothy Lloyd
SAE Aerospace Standards Specialist
dlloyd@sae.org

David Zika
Chairperson of SAE Aerospace ASG
david.p.zika@boeing.com

William T. Elliott
Vice-Chairperson of SAE Aerospace ASG
william.elliott@lmco.com

Dave Neel
Chairperson of AS-1 Committee
Dave.L.Neel@lmco.com

Dr Mirko Jakovljevic, MBA
AS-2D Time Triggered Architecture
Mirko.Jakovljevic@tttech.com, www.tttech.com

Greg Newman
Chairperson of AS-2 Committee
Greg.Newman@elbitsystems-us.com

Bruce A. Lewis
AS-2C Subcommittee (AADL)
bruce.a.lewis@us.army.mil

Christopher Winslow
Chairperson of AS-3 Committee
christopher.c.winslow@boeing.com

Mike Hackert
WDM LAN Development AS-3A3
Michael.Hackert@NAVY.mil

Mark Hinton
Chairperson of AS-4 Committee
mark.hinton@jhuapl.edu

ASG Newsletter Editor: David P. Zika

Future Meetings

ASG Spring 2013 Meetings

Hyatt Regency Jacksonville Riverfront

April 22 - 25, 2013

www.jacksonville.hyatt.com

in the heart of Downtown Jacksonville



ASG Fall 2013 Meetings

October 21-24, 2013

Doubletree by Hilton Hotel

363 Main Mall Road

Portland, ME 04106

Phone: 207-775-6161

<http://doubletree3.hilton.com/en/hotels/maine/doubletree-by-hilton-hotel-portland-me-PWMMMDT/index.html>



Register for Meetings and Find Meeting Information at:
<http://www.sae.org/servlets/works/committeeHome.do?comtID=TEAASD>

ASG
NEWSLETTER

A Publication of the SAE Aerospace Avionic
Systems Group - SAE International © 2012