



Wilmington Delaware Section

The Sensor January 2006

In this Issue

1. Intelligent Motor Control
2. President's Message
3. Farewell to James Arant
4. Book Review: A Guide to the Automation Body of Knowledge

Upcoming Events

- Jan 31 Section meeting at Delaware Tech**
Intelligent Motor Control
Joint meeting with IEEE
- Feb 28 Plant Tour at**
Joint meeting with South Jersey
RSVP to Jennifer Slivka by Feb 2

January 31, 2006
Intelligent Motor Control Centers
Dave Sterlace of ABB
5:30 Delaware Tech
RSVP to Jennifer Slivka

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Intelligent Motor Control Centers

Speaker Dave Sterlace of ABB

Intelligent Motor Control Centers allow design flexibility, reduced wiring and energy savings through integration of intelligent devices, device level networks, and ethernet communications. Intelligent solutions allow better utilization of intelligent devices through simplified wiring and elimination of complex control interconnecting wiring.

Intelligent Motor Control Centers reduce downtime by providing real time monitoring and remote control of motor functions. Communications via field bus allow maintenance staff to immediately respond to alarms, quickly isolate problems, and identify potential problems before they become serious.

User friendly interface through a web browser allows greater use of available data, resulting in better performance, decreased costs to reconfigure and optimum equipment utilization.

President's Message

By Steve Prettyman

Welcome to a brand new year with all of the hopefulness, prosperity, and optimism that it may bring. I find 2006 to be filled with excitement, interest, and opportunity like never before realized in the ISA. We are experiencing change on a pace never before imaginable and in keeping with that spirit, the ISA has changed the way in which it interfaces with the world. We have a new look and a newly designed website to better serve the needs of our current and prospective members. The new ISA logo and slogan has been updated to reflect a more modern organization and new certifications are rapidly gaining momentum and attracting attention.

Change is the only true constant and ISA is leading the way with respect to automation. In fact, we are "Setting the Standard for Automation". The Wilmington section is also changing to reflect the greater ISA organization. In the final section meeting for 2005 a new member was formally welcomed and presented with an ISA pin. We continue to attempt to attract new members and new contributors. Our program chairs, Debbie Lien and Jennifer Slivka, have done a stellar job in recruiting new vendors with new products and service to sponsor our monthly section meetings. In addition, they have supported the scheduling and arrangement of every executive committee and section meeting.

Moving forward, we have many exciting opportunities ahead of us including the January 31, 2006 ISA/IEEE joint meeting at Delaware Technical and Community College Stanton Campus. This event is always a great networking experience and I encourage all to attend what is certain to be a great presentation on Intelligent MCC.

Looking ahead, the Wilmington ISA has exciting and interesting tours, presentations, and tabletops scheduled for the next few months. We are scheduled to join the South Jersey Section on a tour of the Uniquema Atlas Point facility on February 28, 2006, which I am certain will prove to be a fascinating glimpse into the world of Fieldbus technology.

Many of you may not be aware that the Wilmington ISA is part of District 2 and that there is a leadership conference coming up in March. Present and future leaders, student section advisor, and student members are invited and encouraged to attend. It is also the period in which nominations for District 2 awards are solicited. The Honors & Awards banquet is the high point of the conference and you are encouraged to submit your award nominations for Golden Eagle, Old Shoe, and Distinguished District Individual (DDI) to me or any member of the WISA executive committee as soon as possible. More details will be forthcoming.

We will once again join together for an evening of great food and good company at the annual Shrimp Boil on April 25, 2006. This event is always full of catching up, reminiscing, and laughter. Be sure to mark your calendars!

I look forward to seeing everyone on the last Tuesday evening of every month this year; however, I am especially looking forward to the annual WISA Picnic held on June 27, 2006 at which we cook, eat, drink, play, and, most importantly, honor those

members of the WISA that have earned recognition. Come early and stay late, there is always plenty of everything.

I am excited to be your WISA President for 2005-2006 and I anticipate a great year ahead.

Dave Sterlace of ABB

Dave Sterlace currently work in Business Development & Specification, a cross divisional team devoted to increasing ABB low voltage presence at key Consultant Engineers, Systems Integrators and Key OEM's in the Eastern territory.

·He is a member of the international team developing new circuit protective devices for North American Market.

Dave worked previously as a sales engineer and area manager in California. His other experience includes market development engineer at Buckles Smith Electric, sales engineer at Sierra Sales Engineering, and customer engineer at ASCO power technologies.

Dave has a BS degree in Industrial Distribution from Clarkson University.

Dave lives in Bucks County, PA with his wife, daughter and son.

Alarm Management Summary

By Rusty Shackelford

At the November 15th section meeting Nick Sands presented a summary of the current status of the ISA standards committee on alarm management. This was the third time Nick has presented at a section meeting and he is an interesting speaker. This time he used technology to speak as he had lost his voice.

Nick's presentation summarized the history of alarm management, which ISA has been addressing since 1955. The current focus of the SP18 committee, Instrument Signals and Alarms, is a standard on management of alarm systems. The committee has been working on this since 2003 and is making progress.

The current best practices for alarm management come from the EEMUA 191 report. The SP18 committee is building on that and the existing ISA standards and technical reports. The committee, like all ISA standard committees, is comprised of end users, manufacturers, and general users like consultants.

To date the committee has developed a lifecycle model for alarm systems and resolved some definitions like:

Alarm-An audible or visible means of indicating to the operator an equipment or process malfunction or abnormal condition requiring an action.

The committee hope to complete a documents in 2006.

Farewell to James B. Arant

August 2, 1922-December 23, 2005

By Cullen Langford

Jim, or "JB" Arant was the most senior member of the Wilmington Section. He was a Life Fellow of the ISA and a recipient of the Douglas H. Annin award for contributions to the knowledge of control valves. He was never one to suffer ignorance or apathy lightly. Some of his published magazine articles are wonderful examples of how to attack ignorance head on from a position of absolute certainty.

He contributed to a number of ISA books and to several editions of the Bela Liptak "Instrument Engineers Handbook" The most recent one being the just published Volume 2, Fourth Edition. In this book his original contribution on high technology turbine meters exemplifies his lifelong eagerness to search out and promote the best available technology for difficult applications.

He remained active in ISA on the national level in standards committees for many years until his retirement from the Du Pont Engineering Department as a Senior Consultant. A special interest in control valve noise may have been driven by hearing problems resulting from childhood illness.

A well balanced person he valued his family and friends highly. Other interests included a strong love for the beauty of the wild deserts of the American Southwest. His many close friends will miss him very much. He personified the Consultants Motto, "Often wrong, but Never in Doubt".

Standards & Practices: SP18 Instrument Signals and Alarms

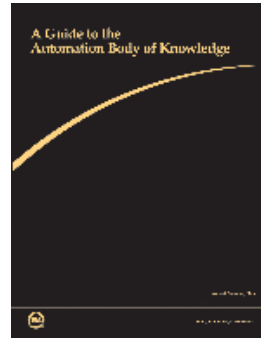
By Nick Sands

The SP18 committee is focused on alarm systems. The committee kicked off an new effort on alarm management in 2003. Donald Dunn of Lyondell and Nick Sands of DuPont chair the committee. Irwin Icayan is the managing director.

ISA S18.1 Annunciators Sequences and Specifications was reaffirmed in 2004. This standard specifies the functionality for alarm cards used in hardwire alarm panels.

The SP18 committee is currently working on guidelines for the management of alarm systems in the process industries. This documents is in draft form and can sometimes be found on the SP18 webpage. The scope includes DCS and PLC alarm systems and safety systems.

Automation Variety Pack



A Guide to the Automation Body of Knowledge edited by Vernon Trevathan-**BBBB (Buy)**

Reviewed by Nick Sands

During the development of the Certified Automation Professional (CAP) program there was a thorough review of the body of knowledge, or the concepts and practices documented in books and articles. There were gaps. Vernon Trevathan, the Vice-President elect of ISA's professional development department, and the father of the CAP program, edited this almost comprehensive guide to the body of knowledge. It is modeled after the analogous guide available from the Project Management Institute. Vernon is an ISA fellow with more than 40 years of automation experience, most with Monsanto. Many of the 34 authors are ISA fellows or authors.

The guide is divided into seven sections, aligned with the domains defined in the CAP program. The chapters are brief, from 3 to 19 pages, covering 35 topics. The first section is basic control covering instruments, analyzers, valves, communications, control concepts, documentation and control systems. The second section is on basic discrete and sequence and manufacturing control. Topics include discrete I/O, discrete control, motors and drives and motion control.

The third section is on advanced control, including topics like process models, advanced control, batch control, environmental control, and building automation. Section four covers safety and reliability. Chapters are alarm management, reliability, safety instrumented systems, electrical installations and installation of equipment in electrically classified areas.

Section five covers digital communications, industrial networks, manufacturing execution systems (MES), network security, human machine interface (HMI), database management, and software connectivity. The sixth section covers operator training, checkout and startup, troubleshooting, and maintenance. The final section covers work structures, which is code for something that includes project justification, project management, and interpersonal skills.

This book provides an overview of the many aspects of automation, like a mini Instrument Engineer's Handbook. The chapters are short and in general targeted towards a new practitioner. For each reader, only some of the chapters will cover new topics. Not all of the chapters are well written summaries, but some are excellent. Overall the book is an expensive buy from ISA at \$95 (member price).

ISA Spring Training Philadelphia, March 27-31

The ISA training team will take the field again during our second annual ISA Spring Training event in Philadelphia, PA, on 27-31 March.

Safety & Security Courses

Safety Instrumented Burner Management Systems: A How To Primer

Cyber Security Vulnerability and Risk Assessment

Grounding and Noise Considerations for Control Equipment and Computers

Securing Industrial Networks: Cyber Protection for Automation, Control, and SCADA Systems

Principles of DCS Alarm Management

Introduction to Boiler Control Systems

Safety Instrumented Systems: Design, Analysis, and Justification

Understanding and Applying Instrumentation in Hazardous Locations

Boiler Burner Management Systems: Meeting NFPA Standard

Networking Courses

Ethernet and TCP/IP on the Plant Floor

Picking the Right Bus - A Comparison of Field and Device Networks

Implementing Wireless Technologies

Process Control & Automation Courses

Introduction to Industrial Automation and Control

Installing, Calibrating and Maintaining Electronic Instruments

Understanding and Tuning Control Loops

Troubleshooting Instrumentation and Control Systems

Understanding Electrical Systems

Planning, Justifying and Executing Automation + Control Projects

Industrial Electronics

ISA - Wilmington Section
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Certification & License Exam Review Courses

Certified Automation Professional (CAP) Review Course

Control Systems Engineering (CSE) PE Exam Review Course

Certified Control Systems Technician (CCST) Review Course

For complete course descriptions or to register online:

Visit www.isa.org/springtraining or call (919) 549-8411 for more event information.