EXECUTIVE BOARD APPROVES NEW VISION AND MISSION STATEMENTS

The ISA Executive Board, meeting earlier this month during the Spring Leaders Meeting in Raleigh, NC, approved new ISA Vision and Mission statements.

ISA's new Vision is to: Create a better world through automation. (This replaces: ISA sets the standard for automation by enabling automation professionals across the world to work together for the benefit of all.)

ISA's new Mission Statement is to: Advance technical competence by connecting the automation community to achieve operational excellence. (This replaces: Enable our members, including world-wide subject matter experts, automation suppliers, and end-users, to work together to develop and deliver the highest quality, unbiased automation information, including standards, training, publications, and certifications.)

ISA President, Brian Curtis, made the following statement about this decision by the ISA Executive Board:

Why is this exciting? ISA now has mission and vision statements that are short, aspirational, and memorable. The previous iterations were too wordy and unwieldy, making it difficult for ISA members to concisely state why we exist and where we're going, and for everyone else to understand why we exist and where we're going.

This is all part of an effort to better define our Society-both within our walls and beyond them-and take a hard look at our organizational mainstays, including our values, strategies, goals, and metrics. Stay tuned for updates as we hone our strategic focus, global brand recognition, and operational priorities.
ISA and Automation Federation (AF) Activity

Approximately 350,000 people-mostly primary and secondary students and their families-attended the **USA Science & Engineering Festival**, 7-8 April in Washington, D.C. At the **ISA/Automation Federation exhibit**, hundreds of young people and their parents (assisted by ISA and AF volunteers) competed in a computerized game based on an actual industrial automation and control system. The game, powered by a programmable logic controller (PLC), demonstrated essential control panel design concepts and computer game programming.

Later in the month, 18-21 April, more than 15,000 students, ages 6-18, from 43 countries competed in three robotics competition championships and a LEGO® competition championship at the **FIRST® Championship Houston**. ISA and AF volunteers met with FIRST competitors and their family members to answer questions about career opportunities in automation and engineering.

Maintaining a strong presence at these premier STEM events is rewarding for all involved. ISA members who take part can reconnect to the excitement that ignited their own drive to pursue an automation career and, at the same time, inspire others to follow their path toward success in the profession.

What Say Ye?

The ISA Birmingham Section Leadership and Officers have already started making plans for the 2018 – 2019 section year, which runs from July 1, 2018 to June 30, 2019. Dates, activities, and meetings are being scheduled and venues reserved for the coming year, and your input is needed.

Please consider the following points and send any response or suggestions to the incoming ISA Birmingham Section President, Jimmy Key, who may be reached at jimkey@southernco.com.
1. What meeting time is best for you on a monthly basis?
   - Lunch (11:30 AM)
   - Afternoon (4:00 PM)
   - Dinner (6:00 PM)

2. Which topics would attract your attention and be most relative to what you do?
   - Cybersecurity
   - Alarm Management
   - Safety Instrumented Systems
   - Wireless Automation
   - Fundamental Measurements
   - Control Valves and Final Control Elements

3. How can we interest more people in ISA Birmingham and enroll them as a member?

   Suggestions ----

4. Where do you prefer to see the technical meetings conducted?
   - KBR Engineering
   - Revere Control Systems
   - Local Restaurant

ISA Birmingham Leaders 2018 - 2019

- President: Jim Key – Southern Company Services (jimkey@southernco.com)
- Vice President: Meg Moore – KBR Engineering (meg.moore@kbr.com)
- Treasurer: Patrick Joseph – Southern Company Services (pvjoseph@southernco.com)
ISA POWID Symposium set for June 26 – 28, 2018 in Knoxville, Tennessee

Leading process industry and power-generation experts—including three eminent keynote speakers—will address the pressing issues and challenges in automation facing the energy industry at ISA's Power Industry Division (POWID) Symposium, 26-28 June 2018 in Knoxville, Tennessee.

Attendees will be able to:

- Discover what's new on the regulatory front and in automation and control systems, instrumentation, cybersecurity and emerging technologies across all variable energy sources, including: fossil fuel, nuclear and renewable energy.
- Meet face to face with the leading authorities and thought leaders at the pulse of change in the energy industry and gain the essential insights and perspectives needed to stay ahead in the rapidly evolving energy marketplace.
- Explore an exhibitor showcase featuring the latest in energy-related products and services; and enjoy networking luncheons and receptions—ideal for meeting new clients/customers and reconnecting with current colleagues.

In addition, ISA is offering the opportunity to take advantage of world-class ISA technical training on 25 June, as a kickoff to this industry symposium event. The activity will include three outstanding keynote speakers who will focus on the most important topics in the power industry today. An outstanding technical program has been developed and this meeting is nearby in Knoxville, Tennessee – you do not want to miss this opportunity if you are working in any power related area.

To register, and gain more information on the 2018 ISA Power Industry (POWID) Symposium, please visit www.isa.org/powid2018. For assistance and answers to any questions, contact ISA at +1 919-549-8411 or info@isa.org.
Meet your 2018-2019 ISA Birmingham Leaders:

Meg Moore, P.E. (KBR) – Vice President

Meg is a Design I&C Lead Engineer assigned to REO projects in the pulp and paper industry. She is responsible for I&C portions of projects from FEL estimating assistance, preparing design deliverables and outage assistance to keeping track of budget and manpower needs. She served as the Treasurer of the ISA Birmingham Section in 2017-2018, as Secretary in 2015-2016, and was awarded the section Gerney Mitchell Award for Distinguished Service for 2017.

She has been a very active participant in the ISA Birmingham Section activities and on the Executive Committee. Meg is a licensed professional engineer in Alabama and Georgia, and has a BSME from the University of Alabama.

Given the chance, Meg will tell you about her three grown children, to whom she attributes her humble personality.

Mark Your Calendar:
The ISA Birmingham Section will not be meeting in June, July or August as we take a brief summer time break. **The first meeting of the 2018-2019 section year will be our annual kick-off event, which will take place on Tuesday, September 11, 2018.**
Dilbert Funnies

DILBERT

THANK YOU ALL FOR COMING. I'M HOPING WE CAN MAKE A LOT OF PROGRESS IN THE NEXT HOUR.

I DIDN'T GET ANY SLEEP LAST NIGHT, SO DON'T EXPECT MUCH FROM ME.

IM SO HUNGRY I CAN BARELY THINK.

I CANT STAY FOR THE WHOLE MEETING. I HAVE ANOTHER THING IN A FEW MINUTES.

IM ONLY HERE TO SABOTAGE YOUR PROJECT BECAUSE I CANT ABIDE THE SUCCESS OF OTHERS.

WHY DON'T ALL OF YOU LEAVE NOW AND I'LL MAKE ALL THE DECISIONS MYSELF.

HOWD THE TEAM MEETING GO?

BY SCOTT ADAMS

BETTER THAN I EXPECTED.

Technical Brain Teaser:
A control valve is used to maintain oxygen flow to a reactor at a maximum design rate of 50,000 scfh. The flowing conditions are a temperature of –50 degrees F and an upstream pressure of 75 psia. The downstream condition is 55 psia before entering the reactor. The control valve flow coefficient is most nearly equal to __________.

a. 10.8  
b. 22.5  
c. 56.7  
d. 62.4

**Answer**

For this application, a globe body control valve would probably be most appropriate style to use. Let’s assume an FL (pressure recovery coefficient) value of .85, which is an average value for this valve construction. The molecular weight of oxygen is 32 and when compared to air, molecular weight of 29, the specific gravity is 1.1. The sizing equation needs the temperature in degrees Rankine, so the negative 50 degrees Fahrenheit becomes 410 degrees Rankine. We will take the compressibility factor to be 1 for pressure less than 100 psia, and we can calculate the expansion factor, Y, from the pressure drop ratio (X) and the limiting pressure drop ratio, Xt. The resulting calculation is shown below.
\[ C_v = \frac{Q_g}{1360 P_1 Y} \sqrt{\frac{GTZ}{X}} \]

\[ C_v = \frac{50,000}{1360(75)(.85)} \sqrt{\frac{1.1(410)}{.27}} \]

\[ C_v = 23.6 \]

\[ X = \frac{\Delta P}{P_1} = \frac{20}{75} = .27 \]

\[ G = 1.1 \]

\[ T = 410^\circ R \]

\[ X_{tr} = .85 \text{ F} = .85 (.85) \]

\[ X_T = .61 \]

\[ Y = 1 - \frac{X}{3X_T} \]

\[ Y = 1 - \frac{.27}{3(.61)} \]

\[ Y = .85 \]

Answer is B 23.5