September meeting report

The ISA Birmingham Section held its kick-off meeting for the new society year on Tuesday, September 11, 2018, at Logan’s Roadhouse on Highway 280. This is an annual event to get the activities started, mobilize the section, and outline what to expect as the time progresses. President Jim Key noted the significance of the date and the news we heard on this date in 2001, with a moment of silence in respect for the many lost lives.

There was a good turnout and the various team leaders reported on:

- student activity plans,
- financial status,
- membership recruitment,
- honors and awards,
- upcoming 2019 short course,
- the liaison with the Engineering Council of Birmingham,
- technical programs scheduled,
- annual budget considerations
Cliff Fleming outlines some complicated idea to Skip Wells and Mark Isbell, who are transfixed and interested in the final outcome.
Several of the meeting attendees contemplate their food and focus on eating, while Larry Wells conjures up another of his wild ISA stories from days past. It is evident that the food is meeting expectations for the whole party.

ISA Birmingham Takes Part in Job Fair at UAB

On September the 6th, UAB held its annual School of Engineering Career Expo/Dean’s Welcome Back Luncheon. This event is designed to give students an opportunity to connect and network with companies around the country for employment opportunities.

There were over 23 Companies present and around 150 students in attendance. Although this is primarily a Job Fair, the Birmingham ISA Section believed this to be a great opportunity to introduce ISA to the Engineering students. This turned out to be a great event and indeed a great opportunity to showcase ISA!
The students were engaging and genuinely interested in what ISA can offer them in their careers in the areas of networking, opportunities, mentoring, and overall career development. The students were given ISA brochures and invites to the September Kickoff meeting to be held on 9/11/18, at Logan’s Roadhouse on Highway 280.

The ISA Birmingham Section was able to connect with Student directors and administrators and are looking forward to expanding our presence at the College/University level.

In attendance from ISA were (L-R) Beth Clarkin (Assistant ISA Birmingham Webmaster), Yao Wang (Student liaison of the Birmingham section of ISA), and Patrick Joseph (Treasurer, ISA Birmingham Section).

The display prepared by the ISA Birmingham Section leaders included materials explaining the goals and objectives of ISA, sample instruments and devices, along with a working programmable controller that was used for demonstration. The benefits and values of ISA participation were discussed and the attendees were invited to take part in local ISA Birmingham events and
Meet your 2018-2019 ISA Birmingham Leaders:

**Mark Isbell (Yates Engineers)** - Program Chair
Another of the new leaders in the ISA Birmingham Section is Mark Isbell, who is employed by Yates Engineers. Mark is a Principle Design Lead in Pulp and Paper and Chemical industries of the company. He is responsible for scoping, estimating, manpower loading, developing design deliverables and outage assistance for the various customers. He has worked in the Instrumentation and Controls field for over 30 years primarily in consulting.

Mark is responsible for the speakers for our technical sessions and for other section sponsored events. Please contact him at misbell@wgyates.com, if you have a suggestion for a speaker for any of the upcoming meetings. The goal is to provide a forum for technical information dissemination that will interest the broad range of section membership.

He has participated in the ISA for many years and looking forward to being a part of the Birmingham Section Leadership Team.

His hobbies include Bass Fishing, playing at Golf and Camping.

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**A Note from the ISA Birmingham Section President:**

The kickoff meeting on Tuesday night, September 11, 2018, brought our leadership together with many of our members and interested guests. We discussed our programs, our good financial condition, the membership status, ISA activities to date and in the future. This was a great time of sharing and gaining insight for future events.

Thanks to Yao Wang (Student liaison), Beth Clarkin and Patrick Joseph, our student outreach and participation in the Job Fair at UAB, on September 6, 2018, was an enormous success. They had a great time and ran out of literature as the information was taken up by eager students.

Our participation unfortunately revealed that many had never heard of ISA even though ISA standards are used throughout industry. We are a specialized group, yet critical for the safe and efficient operation of industrial processes. ISA brand and logo recognition would be better if we participated in more events, those hosted by other schools and even vendors in the area. Our theme this year is “Engage”. I encourage you to volunteer to represent ISA at events as they are identified. It’s a great way to network and enhance your professional development and leadership skills.
The key words here are Engage and Volunteer, because involvement is the best way to get something in return.

Jimmy Key, P.E.

Mark Your Calendar:

- **Technical Meeting: Tuesday, October 9, 2018**
  - Time: 4:00 PM
  - Speaker: Eric Woods – Delphian Corp./Vaughn Associates
  - Location: KBR Engineering

- **Technical Meeting: Tuesday, November 13, 2018**
  - Time: 4:00 PM
  - Speaker: John Cover – A&E Engineering
  - Topic: “Experiences with HMI Design”
  - Location: W.G. Yates Company

- **Technical Meeting: Tuesday, January 8, 2019**
  - Time: 4:00 PM
  - Speaker: Paul Gruhn PE, CFSE – aeSolutions – Houston, Texas
  - Topic: “The Next Bhopal”
  - Location: Revere Control Systems
Anyone with suggestions as to program topics and presentations, should contact Mark Isbell at misbell@wgyates.com, with ideas and suggestions.

SAFETY TOPIC

No Problem in transporting the ladder!
Technical Brain Teaser:

A programmable logic controller is to be used to implement a burner management system for a boiler. The system design shall upgrade the burner management functions on a 50 MM btu/hr, two burner, gas fired boiler to current NFPA standards. Igniters will be interrupted when the timed trial for ignition of the main burner has expired. PLC inputs and outputs will de-energize to shut off fuel to the boiler.

The primary reason a non-redundant programmable logic controller is used for a burner management system instead of relay logic is to:

a. Make functional changes by field personnel easier
b. Make functional changes while operating possible
c. Decrease space requirements and cost to implement more complex logic
d. Allow PID control in the burner management system

Scroll Down for the Correct Answer
**Answer**

If you are dealing with a burner management system for a boiler, there should be no intent to make field changes easier for field personnel. This will be a password protected activity and restricted to a certain few. Also, it is not advisable to make revisions while the system is operating and the controls are discrete with no analog capability needed for this type of control activity. The PLC will take up considerably less space than relay logic and makes the programming of more complex logic easier.

**Answer is C**  
(Most Appropriate)  
Decrease space requirements and cost to implement more complex logic.