Water/Wastewater and Automatic Controls Symposium 2015 (WWAC 2015)

ISA Volume 510

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4 – 6 August 2015

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ISA Volume 510- WWAC 2015 Program

Monday, August 3, 2015

8:00am-4:00pm	Asset Management and Enterprise Integration Using the ANSI/ISA95 Standard (day 1 of 2)**

Tuesday, August 4, 2015

8:00am-4:00pm	Asset Management and Enterprise Integration Using the ANSI/ISA95 Standard (day 2 of 2)**
8:00am-4:00pm	Introduction to the Management of Alarm Systems (1 day)**
12:00pm-12:30pm	**Early Symposium Registration & Badge Pick-Up**
2:30pm-5:00pm	Tour of Treatment Plant (transportation provided)***

** *Short courses are optional. Separate course registration required.*
*** *Limited capacity on tour. Tour bus leaves from hotel lobby. Invitations will be sent out 3 weeks prior to tour to registered symposium attendees. RSVP required.*

Wednesday, August 5, 2015

7:00am	**Registration, Badge Pick-up, & Breakfast**	
8:00am	**Opening Remarks**	
8:15am	Keynote Speaker **Water Industry – A Utility Perspective: Challenges to Solutions – Closing the Gap** 1 John S. Young, Jr. P.E., Owner, John S. Young, Jr, LLC – view abstract	
9:00am	Invited Speaker **Open Secure Automation: Observations for Improved ICS Reliability, Security and Performance** **N/A** Albert Rooyakkers, Founder, CTO, and VP of Engineering, Bedrock Automation – view abstract	
9:45am	**Coffee Break & Exhibits**	
	Track 1	**Track 2**
10:30am	**Migrating to Digital Bus Technology** 21	**Effectively Deploying Alarm**

	Hassan Ajami, Process Control & Instrumentation (PCI), and Anil Gosine, Detroit Water & Sewerage Department –	**Management to SCADA Systems** Graham Nasby, P.Eng, PMP, CAP, Eramosa – 174
11:00am	**Challenges and Lessons Learned for the Design and Implementation of Large PROFIBUS Network** 25 Francisco Alcalá, CDM Smith, and James Powell, P.Eng., Siemens Canada Limited –	**Getting the Most from Your SCADA Data** 185 Emile Richard, P.E., Portland Water District-
11:30am	**The Ugly Duckling Becomes a SWAN: The Success Story of Anglian Water's Smart WAter 41 Network** Jeff Miller, P.E., ENV SP, and Ivan Nazzaretto, Schneider Electric –	**Looking for Trouble on OT Networks: Tools and Techniques to Identify Threats to ICS N/A Communications** Bryan L Singer, CISSP, CAP, Kenexis –
12:00pm	**Lunch & Exhibits**	
1:00pm	**Design Assist – Not Just For Construction Projects: Using Alternative Delivery For SCADA System Replacements** 61 Charles Aycock, City of Roseville, Dean Ford, CAP, PE, Westin Engineering, Inc, and Dave Kubel, PE, Tesco Controls, Inc –	**First – Make A Business Case For Cybersecurity** 194 Don Dickinson, Phoenix Contact –
1:30pm	**Southern Nevada**	**Data Diode**

	Water Systems Controls Upgrade: A Very Large Scale Controls Project 71 Jeff Blue, CAP, Southern Nevada Water System –	**Cybersecurity Implementation Protects Operations Network and Facilitates Transfer of Operations 204 Information to Business Users** Dennis Lanahan, Owl Computing Technologies –
2:00pm	**Making the Case for SCADA Master Planning** 82 Raluca Constantinescu, AquaR, Inc. –	**Demystifying Government-Validated Solutions: Navy Case Study Shows How Critical Infrastructure and Facilities Can Benefit** 210 Frank Ignazzitto, Ultra Electronics, 3eTI –
2:30pm	**Coffee Break & Exhibits**	
3:45pm	**Utilizing Instrumentation and Control Tuning for BNR Optimization** 88 Craig Fuller, P.E., AECOM Technology Corporation, Norman Anderson, P.E., Charles Nichols, Polk County – Utilities Division, David Fitzgerald, P.E., D.P. Fitzgerald, Inc, and Donald Schlicht, P.E., Curry Controls Company –	**Achieving Operator Buy-In of High Performance Graphics** 224 Jason Hamlin, City of Lynchburg, and Carter Farley, P.E., InstruLogic Corporation –

4:15pm	**On Demand Pump Condition and Optimization** 103 Jeff Miller, P.E., ENV SP, and Brian Hinkle, Schneider Electric –	**No compromises for secure SCADA 233 Communications – even over 3rd Party Networks** Norman Anderson, P.E., Polk County – Utilities Division, and Sokha Hay, Tempered Networks –
4:45pm	**Developing a Utility Analysis and Integration Model (UAIM)** 123 Cello Vitasovic, Ph.D., P.E., Metropolitan Water District of Southern California, and Barry Liner, Ph.D., P.E., Water Environment Federation –	**WWTP – Lift Station Monitoring & Control: The Process Begins Here** 242 Alan Vance, Endress+Hauser, and Terry Sages, Rockwell Automation –
5:15pm	**General Reception and Cash Bar**	

Thursday, August 6, 2015

7:00am	**Breakfast**
8:00am	**Opening Remarks**
8:10am	Preview of next year's 2016 ISA Water/Wastewater and Automatic Controls Symposium
8:15am	Invited Speaker **Situational Awareness – The Next Leap in Industrial Human Machine Interface Design** **139** John Krajewski, Director of Product Management HMI/SCADA, Schneider Electric | Invensys –
9:00am	Guest Speaker **WEF Current News and Trends** N/A Tom DeLaura, P.E., Past Chair, WEF Automation and Information Technology

	Committee & Vice-President, Eramosa International –	
9:15am	Guest Speaker **AWWA Current News and Trends** 163 Mike Sweeney, Ph.D., P.E., Florida Section of the American Water Works Association (AWWA) & Deputy Executive-Director, Toho Water Authority	
9:30am	2014 Water Wastewater Automatic Control Symposium / Water Wastewater Industry Division Awards	
9:45am	**Coffee Break & Exhibits**	
10:30am	Forum Session **The Role of Automation within the Utility of the Future** 156 **Moderator:** Tom DeLaura, P.E., Chair, WEF Automation and Information Technology Committee & Vice-President, Eramosa International **Panel Members:** Don Dickinson, Senior Business Development Manager – Water Sector, Phoenix Contact Jeff Miller, PE, ENV SP, Water Solutions Architect, Schneider Electric Dan Cote, PE, Senior I&C Engineer, McKim & Creed Barry Liner PE, Director, Water Science & Engineering Center at Water Environment Federation (WEF) Mike Sweeney PhD PE, Florida Section of the American Water Works Association (AWWA) & Deputy Executive-Director, Toho Water Authority	
12:00pm	**Lunch & Exhibits**	
	Track 1	**Track 2**
1:00pm	**Distributed Network Protocol (DNP3) for Water Systems** 252 Keith Kolkebeck, United Water –	**HMI/SCADA is Key in Preventing Unplanned Downtime** 324 Matthew Wells, GE Intelligent Platforms –
1:30pm	**Designing a Wireless Network: Steps / Considerations / Do's & Don'ts** 266 Patrick Ho, Eaton-	**Are You Disrupting the Control Room?: How to Manage Change and Introduce High Performance HMI Concepts in Practice** 335 Ryan Kowalski, P.E., ARCADIS –
2:00pm	**Methodology to Develop Optimum Control Strategies: Controlling Wastewater Plant Inflows** 281 Maxym Lachance, Eng., Tetra Tech and Sreekanth Lalgudi, P.Eng., EPCOR Utilities Inc. –	**All Aboard the SCADA Mothership** Patrick Cooke, Trihedral Engineering – 353
2:30pm	**Coffee Break & Exhibits**	

3:45pm	**Benefits of a SCADA Master Plan Framework for Utilities** 298 Manoj Yegnaraman, P.E., Jeff Martin, Carollo Engineers, Inc., and Norman Anderson, P.E., Polk County – Utilities Division –	**Flowmeter Verification in Water/Wastewater Industry** 367 Alan Vance, and Steve Milford, Endress+Hauser –
4:15pm	**The ZYX's of Control Systems** 308 Norman Anderson, P.E., Polk County – Utilities Division	
4:45pm -5:00pm	**Closing Remarks**	