

Update

Newsletter for ISA Certified Control Systems Technicians® (CCST®)



Winter 2008

In this issue:

CCST of the Quarter	1
Winds of the Future	2
Why Certify?	2
To Quiz or not to Quiz	3
Welcome New CCSTs	3
FAQs	4

CCST® of the Quarter: Armando Morales Sanchez, Level I



It was a personal decision for Armando Morales Sanchez to pursue the ISA Certified Control Systems Technician (CCST®) Certification, Level I. "The greatest benefit of certification is recognition. I feel it would make me more marketable, if I were to decide to move forward professionally," said Morales.

Morales has worked in the control system industry for 27 years. For the past 20 years, he's held positions in Control Engineering and Pilot Plants Laboratory at the Mexican Petroleum Institute. He currently holds the internal auditor position there.

The Mexican Petroleum Institute is headquartered in Mexico City, Mexico. It is a public research organization dedicated to developing technical solutions, conducting basic and applied scientific research, and providing specialized technical support to Pemex, the unique official public oil Mexican Company.

Morales' employer commends his achievement of certification. "My company creates an annual report where I was recognized for my CCST Certification," said Morales.

While the main activities of his position do not require certification, it will soon aid him. He will be working with external technicians at the end of this year, and his certification will show his qualifications and commitment to the industry.

His main responsibilities at the company include supervising instrument purchases, maintenance and configuration of instruments, and maintenance of control systems. He also works with wiring and anything related to the specialty of control.

Morales learned about the CCST Certification Program through his long-term membership with the ISA Mexico Section. After investigating it on the ISA Website, he decided to

begin the process.

The CCST exams cover seven performance areas or domains, including calibration, loop checking, troubleshooting, startup, maintenance/repair, project organization, and administration. The CCST program offers three levels of certification with varying experience and education requirements and a technician may enter the program at any level, pending qualification.

Level I requires a minimum of five years experience, education, and/or training. Level II requires seven years experience, education, and/or training, with at least two years in instrumentation/measurement and control. Level III requires thirteen years of experience, education, and/or training, with at least five years in instrumentation/measurement and control.

"My company creates an annual report where I was recognized for my CCST Certification."

- Morales

CCSTs must renew their certification every three years. This is accomplished by earning Professional Development Points (PDPs) by working, training and continually gaining knowledge in the field.

To prepare for the exam, Morales used the CCST study guides, forms, questionnaires, and preparation materials available at his ISA Mexico Section.

His recommendation to anyone thinking about pursuing CCST certification: organize study guide questions into categories and consult colleagues for additional help. "You should consider having the [professional] experience to take the exam," said Morales.

Morales' CCST Certification is valid until 2010. Next, he plans to pursue another goal of earning the Certified Automation Professional (CAP®) certification.

Winds of the Future

By George P. Lister, CCST III, Instructor with the Wind Energy Technology program at TSTC (Texas State Technical College)

The American Wind industry is on track to surpass the banner year of 2007, when 5,249 MW of wind energy were installed, with a total of about 7,500 MW, so far this year (7,500 MW would generate enough electricity to power the equivalent of about 2.2 million homes). With wind turbine towers popping up on the U.S. landscape at a rate of almost 10 per day, the need for people to maintain and repair them is reaching the critical point. Last year, 3,200 new wind turbines were installed across the nation. It brought the total number of towers with wind-catching blades to more than 25,000.

Wind plant construction, maintenance and operations all create jobs, which in turn generate income for local businesses and communities. The National Renewable Energy Laboratory (NREL) estimates that 6 to 10 permanent operations and maintenance jobs are created for every 100 megawatts of installed wind capacity. One hundred MW of installed wind capacity also creates about 100 to 200 short-term construction jobs.

Florida-based FPL Energy has more than 200 wind turbines in North Dakota and a total of more than 7,600 in 16 states. Field staff number about 500, and the majority of them are technicians, said spokesman Steve Stengel. "These are good-paying jobs with a lot of upside potential," he said, estimating the

starting annual salary for a typical wind technician job at between \$35,000 and \$40,000. The Canadian Wind Energy Association is projecting 10 GW (1 GigaWatt=1000MW =1000000kW) of wind power by 2015 resulting in the immediate need for 2500 wind technicians.

A wind turbine technician troubleshoots complex mechanical, hydraulic, electrical & electronic problems on variable pitch/speed turbines. An Associate degree in a technical electrical / electronic field or min 3+ years work experience in electrical / electronic repair industry is preferred. Prior wind experience is always a plus. Technical positions within the wind industry run the full spectrum of technologies including high voltage AC generation and distribution, data networking, fiber optics, SCADA systems, motor controls, PLCs, and instrumentation.

For those interested in travel, opportunities are available. The wind energy field offers opportunities throughout the world with corporations such as GE Energy, Siemens, Vestas, Mitsubishi, TECO/Westinghouse, to name a few.

An ISA Certified Control Systems Technician® (CCST®) is uniquely suited to the requirements of the wind energy field because of his/her breadth of knowledge in the process industries. For more information about the American Wind Energy Association, visit www.awea.org.

Why Certify?

Conversations about the benefits of certification were on the menu at the CCST and CAP Certification Networking Luncheon at ISA EXPO in Houston, Texas on 15 October. Attendees included those who are currently certified and candidates from both of ISA's certification programs. Other attendees included a number of people who would take the certification exam during ISA EXPO, ISA instructors, ISA authors, and members of the ISA staff.

"Companies are looking for candidates with at least a 2-year degree and certification. Industry certification is becoming a standard." - Stokes

Networking luncheon participants entertained the topic of why certification was and still is a goal for them. Some even provided insights into how the automation profession is now favoring continuing education and certification now more than ever. ISA instructor Tom Stokes, CCST III, took part in the discussions during the luncheon. According to Stokes, "Companies are looking for candidates with at least a 2-year degree and certification. Industry certification is becoming a standard."

George Lister, CCST III, noted that certification is a great tool for personal development. He suggested to luncheon attendees who are preparing for certification exams to use the self-study guides to help prepare for certification exams. "The study guides allow you to evaluate potential exam content that you may encounter," said Lister.

For CCST and CAP luncheon participants, this was a prime

opportunity to meet new acquaintances, engage in technical conversations with fellow certified peers (that they just can't have anywhere else), and address how ISA certification was a goal for them. The top reasons for professionals to pursue certification, as discussed at the luncheon, included job portability, credibility within the community, and a greater breadth of industry knowledge. There was a consensus among participants on how certification will increase their marketability and symbolize personal achievement.



Darryl Hill, Instrument Technician, Abbott Laboratories

We are happy to announce that 34 people took certification exams during ISA EXPO and 29 passed! We look forward to welcoming them in the next newsletter.

A listing of those certified in an ISA program can be found on each program's web page. If you missed this year's networking luncheon, please make plans to join us next October during ISA EXPO in Houston, Texas. If you have any questions before then, visit www.isa.org/certify or contact ISA Customer Service at (919) 549-8411.

To Quiz or not to Quiz

By Kristy Becker, Certification Administrator

*To be, or not to be: that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles,
And by opposing end them?*

From Hamlet, Prince of Denmark, William Shakespeare



George Lister, CCST III, and Rahul Bhojani, CAP-Ouch, it Megahertz

During the week of 15 September, I spoke to several ISA Members/ EXPO alumni who questioned whether ISA was moving full steam ahead with ISA EXPO 2008. In the wake of Hurricane Ike, some wondered whether or

not people would come, especially when so many locals had damage to deal with at home or on the job.

Fortunately for Houston, ISA EXPO did happen. The greater Houston area was thankful for our support of their event and hospitality industry. And, we had our rabble-rousing slurry of questions to be answered at the second annual Certification Quiz & Conquer.

At the last minute, a CCST participant in the Quiz had to drop out due to a situation at work that needed his attention. And, one CAP had a family illness that almost prevented him from attending. But, as they say in Hollywood, the show must go on. And the Subject Matter Experts I work with for developing and maintaining the CAP and CCST certifications pulled through.

There was pressure on the CAP, Rahul Bhojani of Bayer Technical Services to participate...he wanted to defend the **Ouch, it Megahertz's** title along with George Lister, CCST III, Instructor with Texas State Technical College in Sweetwater. The second team was saved by one (little) ISA Senior member pin – which I promised to Andy Johnsen, CCST III, of Southlake Systems Services Inc. in Indiana – if he could be my CCST replacement. Henrik Christiansen, CCST III and CAP, with CDI Engineering Solutions, was the second member of **The Over-Analyzers**, and back for a second shot at Ouch it Megahertz.



Henrik Christiansen, CCST III, CAP and Andy Johnsen, CCST III

Greg Lehman, CAP, with Washington Division, URS Corporation, really perfected his skill of not giving one team an advantage over the other as MC of the competition. Several other ISA peers popped in, like Harald Langer of S & B Engineers and Constructors, who earned his CAP at ISA EXPO 2007, and back again this year, Michael Rothaupt from DELCORA.

ISA Certification Quiz & Conquer is a fun way to show potential certification candidates that CAPs and CCSTs have so much knowledge, and that they too can achieve one of the designations.

If someone you know is asking the same question as Hamlet, help them make **“be”**ing a CAP or CCST a goal for 2009. Check out the website for the latest news, and the newest CAPs and CCSTs at www.isa.org/certify or contact ISA Customer Service at (919) 549-8411.

Welcome New CCSTs!

CCST Level I

Javier Eduardo Angulo Sol	Siemens SA de CV
Thomas L. Ankenbrandt	Micron Technology
Mark R. Barkley	Lyondell Basell
Thomas F. Barricella	Novartis Pharmaceuticals Corp
Clarence J. Bearce	Lincoln Paper & Tissue
Tonya D. Bowman	Georgia Power Co
Victoria L. Brown	Georgia Power Plant Hammond
David J. Bruggink	Aldrich Chemical
Ronnell Romelo Burnett, Sr	Detroit Thermal
John D. Busha	TPL Technical Services
Luis Campos Hernandez	Industrias La Constancia
Jerry T. Carr	Houston Refining
John L. Chiarelli	Monsanto Co
Rene Eduardo Cuellar Figueroa	Soluciones El?tricas
John M. Davis	Houston Refining LP
Douglas P. Dees	Georgia Power Co
Charles R. Dietrich	US Steel Great Lakes Works
Steven Early	Intel
Jeremy K. Eberle	Lyondell Basell Industries
Samuel Enriquez	DCCCK Engineering
Lewis A. Feil	Bay Area Instrument & Electrical
Macario R. Fernandez, Jr.	Chevron
Keith D. Gentry	East Cherry Creek Valley Water & Sewer
Lowell Timothy Gentry	Johns-Manville
Karl A. Golz	Dominion Energy

Kyle P. Haight	Lake Erie Electric
Richard L. Hall	UA Local #250
John R. Hamilton	Georgia Gulf Co
Delmont Hanscom	Lincoln Paper & Tissue
Eric D. Hardcorn	TPL Technical Services
James H. Haw	Lyondellbasell Houston Refining
Mark A. Jenner	BASF Whitestone
Joshua M. Kary	US Steel Greak Lakes Works
Stan K. King	US Steel
Timothy LaDale Cates	Noramco Inc
Jorge Enrique Lainez Beltran	Siemes SA de CV
James F. Landry	Crosspoint Engineering
Sheldon W. Leonard	Lincoln Paper & Tissue
Bryan E. Longtine	Marathon Oil Corp
Michael R. Maloney	IBEW
Mark A. Martin	Miller Brewing Co
Donald R. Matteson	REC Silicon
Eduardo R. Mendoza Comparam	Energia Costa Azul
Saturnino Millar	Goodrich Corp
Brian C. Mowrer	Center Line Electric
Marc Shane Noble	Cincinnati State Technical College
David Wayne Nolen	Georgia Gulf LLC
Robert W. Otwell	Lyondell Houston Refinery LP
Luis A. Perez	Wyeth
Philip N. Propst	Lyondell Basell
Matthew K. Robertson	The Linde Group

Rodrigo Ruiz Renteria	Instrumentacion Control Y
	Computation
Carlos Ernesto Sandoval Rodriguez	LaGeo SA De CV
Michael Garrett Schmoll	University of Iowa
Kenneth Paul Schroeder	Wade Trim Operations Servies
Kelly S. Shepperd	Hess Corp
Landon D. Smith	TPL Technical Services
James R. Sutherland	Lincoln Paper & Tissue
Jamey Lee Sweetland	
Jose Luis Vazquez Lugo	Altos Hornos De Mexico SA
Gregory C. Wight	Lake Erie Electric
Toby M. Wybl	Lyondell Houston Refinery
Constantino Carlos Zamora Hasbun	Ingenio La Cabana

CCST Level II

Michael S. Beckwith	Tropicana Products
Derek J. Benningfield	Alyeska Pipeline Service Co
John L. Chiarelli	Monsanto Co
Joshua M. Kary	US Steel Greak Lakes Works
Vernon Christian Sommer	City of Vacaville
Josh Dane Vannice	Centennial Water and Sanitation
	District
Jack W. Webb, Jr.	Commissioning Agents Inc

CCST Level III

David L. Sizemore	Baker Petrolite
-------------------	-----------------



ISA
 67 Alexander Drive
 P.O. Box 12277
 Research Triangle Park, NC 27709

Non-profit Org.
 U.S. Postage
PAID
 Raleigh, NC
 Permit #1461

Dated Material—Open Immediately!

Please share this publication with others in your company:

- Control Systems Technician
- E&I Supervisor
- Training Manager
- Control Systems Engineer

FAQs

Can I Complete the CCST Application Online?

The CCST application process has been streamlined. Applicants will only supply the back-up documentation of work experience, education, or training if their application is audited. You can now apply using an online fill-in form. It takes just minutes. Visit www.isa.org/ccst and get started on the path to certification today. Submit an application now for Window 1 in 2009 or another Window in 2009.

When are the 2009 Electronic Testing Windows?

Exam Testing Window	Exam Application Postmark Deadline
Window 1: 1 March 2009 – 30 April 2009	Thursday, 15 January 2009
Window 2: 1 1 July 2009 – 31 August 2009	Friday, 15 May 2009
Window 3: 1 November 2009 – 31 December 2009	Tuesday, 15 September 2009

When are the 2009 ISA Spring Training Dates?

30 March - 2 April 2009 • Philadelphia Airport Marriott



Founded in 1945, ISA (www.isa.org) is a leading, global, nonprofit organization that is setting the standard for automation by helping over 30,000 worldwide members and other professionals solve difficult technical problems, while enhancing their leadership and personal career capabilities. Based in Research Triangle Park, North Carolina, ISA develops standards; certifies industry professionals; provides education and training; publishes books and technical articles; and hosts the largest conference and exhibition for automation professionals in the Western Hemisphere.

Certification

ISA certification provides an objective, third-party assessment and confirmation of a person's skills, and gives them the opportunity to stand out from the crowd and be recognized. ISA currently offers three certification programs: Certified Automation Professional® (CAP®), Certified Control Systems Technician® (CCST®), and Certified Industrial Maintenance Mechanic® (CIMM®).