

 <p>Greater El Paso Section The Global Voice of Quality™</p>	<p><i>Amigo</i> <i>Quality</i> Volume 39 Number 9</p>
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Welcome to the June 2019 issue of the Newsletter, your local provider of information and learning opportunities related to quality professionals.

Notice: The section is actively looking for volunteers willing to serve on the leadership committee. If you are willing to volunteer, please send an email letting us know your willingness to serve to Officers@asq1401.org with a subject of "Willing to serve on the leadership committee."

General Membership Meeting

DATE: Wednesday, June 19, 2019

SCHEDULED TIME: 6:30 P.M to 8:00 PM

LOCATION: Hilton Garden Inn at University Ave.

Speaker Lonnie Wilson, Owner and Principal Consultant – Quality Consultants

Topic Sustaining Workforce Engagement: How to Ensure Your Employees Are Healthy, Happy, and Productive

Leadership Committee Meeting

Month	Date	Day	Time	Location
July	10	Wednesday	Leadership Committee Meeting 6pm-8pm	Dish Network 12085 Joe Battle Blvd Door A {manufacturing} + WEBEX TBA

THE CHAIR SPEAKS

EVARISTO CAMPOS-TORRES

Hello, Fellow Quality Professionals!

I hope everyone is doing well.

Last month we had a great general membership meeting. Toro Co. kindly opened its doors to our section. Students and professionals who attended the tour had a great experience. We learned a lot about their interesting manufacturing processes and products.

This month we will be honored of having Mr. Lonnie Wilson as our guest speaker. He is an expert in Lean Manufacturing techniques and applications including the implementation of the Toyota Production System. He's also the author of three books: "*How to Implement Lean Manufacturing*", "*Lean Refining - How to Improve Performance in the Oil Industry*", and "*Sustaining Workforce Engagement: How to Ensure Your Employees Are Healthy, Happy, and Productive*".

I hope to see you there on June 19!

Best regards,

Evaristo Campos-Torres

Chair, ASQ Greater El Paso Section 1401

AUTOMOTIVE SECTION

HECTOR LUGO

Thank you to all the participants for their contributions in this exciting field, and the winner for this month is: With all of the talk about self-driving cars, an obvious question arises: "How well do the current range of semi-autonomous advanced driver-assistance systems (ADAS) work?"

Trying to find the answer, the Insurance Institute for Highway Safety (IIHS) tested five models from Tesla, Mercedes, BMW, and Volvo on a track and public roads. The five vehicles evaluated were:

- A 2017 BMW 5-series with “Driving Assistant Plus”
- A 2017 Mercedes-Benz E-Class with “Drive Pilot”
- A 2018 Tesla Model 3 and a 2016 Model S with “Autopilot” ([software versions 8.1 and 7.1, respectively](#))
- A 2018 Volvo S90 with “Pilot Assist”

The systems tested—specifically, adaptive cruise control (ACC) and active lane-keeping—are designated as Level 2 on the Society of Automotive Engineers (SAE) five-level scale of autonomy. That means they can assist with steering, speed control, and following distance, but they don’t allow the driver to be fully disengaged from operating the vehicle.

Taking all of the tests together, IIHS concluded that they “can’t say yet which company has the safest implementation of Level 2 driver assistance,” but that it was “important to note that none of these vehicles are capable of driving safely on their own.

See you at the meeting!

EDUCATION SECTION

KIM PRIES

What quality tools work and nearly always work? I would suggest statistical process control (SPC or control charts), measurement systems analysis (MSA), and designed experiments (DOE). I would also withhold judgment on the Ishikawa diagram, which is qualitative and a tolerable tool to collect the results of structured brainstorming.

Unfortunately, our profession is plagued with a plethora of tools that have little basis for the claims made for them:

- Failure Mode and Effects Analysis (FMEA): every 2-3 months somebody in *Quality Progress* claims it is a great tool for reliability without ever providing justification for that assertion. I have information that suggests otherwise! I always wondered how we could take days to produce a reasonable FMEA and still make big mistakes...

- Reliability engineering: most of the great math formulae are dependent on exponents for calculation. Those are determined by experience, which means by the time you have a good number you also have a ton of bad product! Robustness testing is the way to go.
- Colorful risk management matrices.
- Quality Function Deployment and most of the other matrices (note that I disagree with Alfonso on this one; being a standard is not terribly relevant; furthermore, these kind of tools become popular because they are placebos followed by confirmation bias, not through a careful assessment of effect size)
- Lab certifications if you are not going into business for yourself
- Standards seem to provide for a consistent level of mediocrity without ever showing the path to permanent and meaningful improvement (look at the public schools...some of the standardized curricula are ineffective)
- Most plans

My experience suggests the best way to go is evolutionary design with concurrent high levels of testing (battering!). It is almost the same with software development, although design in software is still a point of frequent fantasy among standards supporters. Education is an evolutionary process also: adaptation, improvisation, testing, and more.

Check it out!

MANAGEMENT SYSTEMS

ALFONSO ENRIQUEZ

QFD is an international standard.

QFD stands for Quality Function Deployment. It is a means to capture and preserve the Engineering thought process. It was created by Joji Akao¹ in 1966, it was introduced in the USA with an article in Quality Progress in 1983. The QFD Institute was founded in 1993, The QFD Institute came out with a modern version of QFD

called Blitz QFD, and there is an annual symposium on QFD, this year's The QFD 25th International Symposium will be held on Boise, Idaho on September 6-7. There are now QFD green belts, QFD black belts and QFD Master Black Belts. Mexico is the country in the world with more QFD green and black belts. GCC a company with roots in Chihuahua and Juarez² presented a case on the 14th Symposium in 2002.

The ISO 16355-1 was published in 2015, and the companions ISO 16355-2 to 8 were published in 2017.

In trying to find the optimal settings of a plastics extrusion process I noticed that there were different levels of understanding among the engineers, and I decided to teach them QFD. I asked our Quality person in charge of handling customer complaints, to tell us what a customer want. She sent me the first set of what s for the House of Quality, I looked in the internet to see if there was a free template and found one³, the template is really helpful, I did a quick draft of all four phases of QFD, and decided to use the draft as a basis for my QFD workshop. It turned out to be a good means to capture the thought process of the engineers, they liked the tool.

Nate et al⁴ explain that there are six major decision making problems, one of them is the inadequate consideration of possible materials, engineers select the materials that they already know and take short cuts in the selection of the material in order to save time. In our QFD application case we found in phase 2 that we should investigate other materials that could help us improve our process.

¹Akao J. "QFD", productivity press 1990.

²Heron H, Mazur G. "Using QFD to improve Technical Support to make commodity products more competitive" The 14th Symposium in QFD, 2002.

³QFD on line, <http://www.qfdonline.com/templates/> downloaded on May 3, 2019

⁴Natee S.,Low S.P., Teo E.A.L. "Quality Function Deployment for Buildable and Sustainable Construction", Springer 2016.

RE-CERTIFYING AND ASQ CERTIFICATIONS

STEVEN SCHAFER

Out of a total of 4 member(s) whose certifications expired December 2018, 0 will lose their certifications if they do not re-certify by the end of June 2019, 0 member(s) re-certifications are being processed and 4 member(s) completed their re-certifications.

Out of a total of 10 member(s) whose certifications will expire June 2019, 5 will lose their certifications if they do not re-certify by the end of December 2019, 0 member(s) re-certifications are being processed and 5 member(s) completed their re-certifications.

Out of a total of 6 member(s) whose certifications will expire December 2019, 5 will lose their certifications if they do not re-certify by the end of June 2020, 0 member(s) re-certifications are being processed and 1 member(s) completed their re-certifications.

Members can re-certify early! As long as you have enough points you can re-certify as early as six months before your certification expires. Your Certifications will be extended 3 years beyond the certification expiration date you currently have for your certification, so you don't lose anything by re-certifying early. Remember, you can only claim points that you have accumulated up to the time you submit and these points need to be collected during your 3 year certification period. Out of a total of 9 member(s) whose certifications will expire June 2020, 9 will lose their certifications if they do not re-certify by the end of December 2020, 0 member(s) re-certifications are being processed and 0 member(s) completed their re-certifications.

If anyone has questions on how to re-certify to extend their ASQ Certifications and/or how to synchronize them if they have more than one, please let me know. Re-certifying by exam costs more and is a lot more difficult than re-certifying through the accumulation of RU points. You can reach me, the Re-Certification Chair, at 915-241-4780 or (501) 615-8170. Please leave a message on the answering machine if no one answers and I will call back you as soon as I can. You can also reach me via the Internet at spikequate@sbcglobal.net. I am ready to help with any questions you might have about Re-Certifying or about any ASQ Certifications you might

have, call me. The Re-Certification Journal is at the following link and will guide you in the re-certification process <https://asq.org/cert/recertification>

When re-certifying, **always get the most recent Re-certification Journal information**. The lasted Re-Certification Journal is November 2018. For ASQ members the fee for one certification is \$69.00 and for two or more \$89.00; for non-members the fee for one \$109.00 and for two or more \$109.00 each).

Projected Events				
Month	Date	Day	Event	Location
June	19	Wednesday	General Membership Meeting	Hilton Garden Inn – UTEP 111 W. University Ave.
July	10	Wednesday	Leadership Committee Meeting 6pm-8pm	Dish Network 12085 Joe Battle Blvd Door A {manufacturing} + WEBEX TBA
July	17	Wednesday	General Membership Meeting	TBD

2019 Officers/Committee Chairs

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