Introducing the 2019 SAE President, Paul Mascarenas

Former Chief Technical Officer for Ford Motor Co. sees professional development as key for engineers amid transformation of the mobility industry.



Among many other recognitions, 2019 SAE
President Paul Mascarenas was honored by
Her Majesty Queen Elizabeth II with an Order
of the British Empire for services to the
automotive industry, January 2015.

Perhaps it's not that much of a surprise that someone who joined a professional engineering society at age 16 would some day lead one. And so everything seems right about SAE International having Paul Mascarenas as its 2019 President.

It's been more than 30 years since he joined the Institution of Mechanical Engineers in Great Britain as a student. In the intervening years, he's distinguished himself as a leader in the automotive engineering profession—perhaps no more impressively so than in serving as Chief Technical Officer at Ford Motor Co. from 2011 to 2014. He will draw on all of his past experiences as industry veteran and engineering-society member to help make SAE more beneficial to its members, to the mobility industry, and to society.

"I'm tremendously excited to serve as the SAE president," Mascarenas, an SAE and IMechE Fellow, told *Update* in a visit to SAE headquarters in Pittsburgh on December 5. "It's an excitement in the sense of having the opportunity to really contribute to the profession that has served me so well over the course of my career. I've spent 30-plus years in and around the automotive industry and, more laterally, the mobility engineering environment."

"I've always been a huge advocate of continued professional development," he continued. "I grew up in the U.K. and have been a member of IMechE since I was 16. I



Participating in a meeting of SAE-China's International Advisory Committee on China Automotive Technology Strategy consisting mainly of CTOs and principals from international vehicle manufacturers and related organizations, 2018.

continued that professional development through SAE when I located to the U.S. midcareer. So I've had a career-long commitment and interest in continued professional development in terms of both individual development and also in terms of development of the engineering profession as we move through generations of technology and different forms of mobility. Now, to serve in a leadership position at SAE and contribute to the professional development of the next generation of engineers, is for me very natural. It's an honor and something I'm really looking forward to."

Asked what his goals as SAE President



Talking technology, jobs and the urban future on C-Span, 2012—one of Paul's many TV interviews.

are, Mascarenas responded: "At highest level, serving the board of SAE International, ensuring good governance, compliance, ethics—everything that you

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Developed on his watch as Ford engineering VP, the 2012 Boss 302 Mustang Laguna Seca model is one Paul owns and drives with glee.



As VP of North American vehicle programs, Paul oversaw development, sign-off, and launch of the Ford F-150 Super Duty.

would expect of a well-managed organization. So administratively, they're the highest order of priority."

"Secondarily," he said, "looking out into the future, it's working with the other Board Directors to do our part to ensure that SAE International as a member organization and as a group is prepared for the huge transition that this industry is going through right now, from the traditionally defined automotive, aerospace, and commercial vehicle sectors to one which is much more defined around integrated mobility. This requires a different approach with respect to, potentially, the products and services that SAE International is providing to its members."

The transition also dictates, potentially, a different set of skills for the individual engineers working in those various traditional areas. "It also potentially appeals to a different membership group," Mascarenas said, "not at the expense of existing members, but in a more expanded group. For example, connectivity would be one area I would immediately think of, but there are a number of other technologies data analytics and controls come to mind that traditionally have not played a major part in SAE International's business but now become a very integral part when you start to think about this more expanded definition of mobility and integration between our traditional sectors."

His third main goal relates to the annual SAE business plan and the objective of sustainable growth: "Ensuring that we are investing in the future, ensuring we've got the right skills and experience on the SAE Staff."

Elaborating on the transformation of the mobility industry, Mascarenas said SAE International's three sectors "historically have been very well defined—quite discrete

in terms of how they go about their business. But as we go forward, we start to see more convergence between those sectors—convergence in the sense that consumers ultimately expect a more seamless experience in terms of point-to-point mobility, whether for individuals or for products, goods, services, and the like. They want a more connected experience, a more accessible experience, a much more personalized experience, which is where data and analytics figure in.

"Now, the industry itself has to navigate through this themselves because, from a corporate perspective, it impacts the revenue model, the business model. Potentially, you go from selling discrete products and services to selling into a sharing economy. This is clearly not a flipthe-switch-type transition. It's going to happen over many years."

SAE International historically has demonstrated great adaptability in the face of industry changes, "and I think is one of our most important challenges and considerations for the Board now," Mascarenas said. "It's certainly one of the things I'll be spending a lot of time on."

Asked what special strengths he brings to the SAE presidency, Mascarenas noted that his long career in automotive engineering serves as a foundational background. "Since I left Ford just over four years ago," he said. "I've had the



Performing duties as 2014-2016 President of FISITA, handing out an award to Pawan Goenka of Mahindra & Mahindra Ltd., 2016.

opportunity to really expand my perspective through a couple different activities. One is I joined a Detroit-based venture capital firm, Fontinalis Partners, and we invest in next-generation mobility—startups and early-stage companies that are into pretty much all aspects of next-generation mobility, whether it's enabling technologies like mobile payments systems, data management platforms, cybersecurity, or actual direct consumer services such as

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The dream of every avid golfer: a hole-in-one, 2013.

rideshare, bikeshare and the like, freight and logistics, telematics. That's given me the opportunity to see through a different lens this sort of ecosystem that is so quickly emerging around next-gen mobility and the way this space is continually being reinvented."

Mascarenas told *Update* he has been "on the leading edge of this newly emerging next-gen mobility ecosystem as defined in the broadest sense." He sits on a number of public company boards, including ON Semiconductor, which has very sizable portfolio of products, including sensing and

imaging, power management, and standard products serving the consumer electronics industries, he said.

"I also serve on the board of management of two suppliers into the traditional industries," said Mascarenas.
"One of them, U.S. Steel Corp., has a tremendous legacy but is having to reinvent itself for reasons that are well understood. I'm also on board of BorgWarner, another technology company well known to SAE, but again transitioning from traditional internal-combustion engine—gasoline, diesel, to hybrids—to electrification, and making sure they've got the right product portfolio."

The other board he serves on is Spartan Motors Michigan, which has a portfolio of vehicles including emergency response vehicles—fire trucks and the like.

"Bringing all of those experiences in a blended way to the SAE President role is helpful; it gives me broad perspective about the business of SAE International," he said.

Before rising to the CTO position,
Mascarenas served as head of multiple
vehicle programs while at Ford, responsible
for everything from planning to engineering,
to manufacturing launch, to marketing. His
first program was the Mondeo in Europe.

"These were three- to four-year assignments with huge responsibilities," he said of the vehicle programs, "and so the sense of both personal and professional



Chatting with longtime SAE Member Karl Ludvigsen at an SAE WCX event, 2017. Mascarenas served as General Chair of WCX 2010 while with Ford Motor Co.

accomplishment when they were completed —and then to see the vehicles out on the road—was tremendous. The first time through, with the Mondeo in Europe, was the most exciting."

Mascarenas has served as Chair of several SAE conferences, including WCX and the defunct Convergence. In addition, he led two SAE Foundation leadership campaigns and has been involved in various aspects of SAE including standards and publications.

"I'm very excited to now be part of the SAE leadership team," he said. ■

