

2019 Shot Peener of the Year Kelly McClurg

ANNOUNCING THE WINNER of “The Shot Peener of the Year” award is a U.S. Shot Peening and Blast Cleaning Workshop tradition. It was an especially fun event this year because Kelly McClurg is a workshop instructor and was sitting in the audience.

Since 1992, *The Shot Peener* magazine has given the award to individuals in our industry that have made significant contributions to the advancement of shot peening. “Kelly is a rising star in our industry that deserves recognition for all she has already accomplished. Her work in Ultrasonic Shot Peening has helped establish it as a viable tool in aviation repair and maintenance. In addition, she gives back to the industry through teaching and taking an active part in SAE committees,” said Jack Champaigne. Jack is the Editor of *The Shot Peener* magazine and he presents the annual award at the workshop.

Kelly is a Metallurgical Engineer III in the Metallic Materials and Processes department at Bell Textron Inc. in Grand Prairie, Texas. Bell produces manned and unmanned vertical-lift aircraft for commercial and military usage and the company is the pioneer of the revolutionary tiltrotor aircraft. Kelly focuses on heat treatment for the drive systems center. She audits suppliers for heat treat and special processes and acts as a liaison to these companies.

Kelly is also part of a team at Bell that is continuously looking at improved surface treatments, including peening methods, that can improve their products’ performance, reliability, and cost. Some of the current technologies under consideration and investigation at Bell include cavitation peening, flapper peening, ultra fine peening, low plasticity burnishing, laser peening, and variations on process controls for conventional shot peening (such as shot hardness). Bell is investigating repair capabilities with this process.

In addition to her responsibilities at Bell, Kelly has been an active member in the SAE Surface Enhancement Committee and Aerospace Surface Enhancement Committee since 2013. Kelly became the secretary for these committees in 2018. She also leads classes on specifications for the U.S. Shot Peening and Blast Cleaning Workshop.

Kelly graduated from Texas A&M University with a bachelor’s degree in Biomedical Engineering. It was at Texas

A&M that she was first introduced to shot peening. “It was a single paragraph in a chapter on surface enhancement,” said Kelly. She went on to receive a master’s degree in Material Science and Engineering from the University of Texas in Arlington.



Kelly McClurg received “The Shot Peener of the Year” award from Jack Champaigne at the U.S. Shot Peening Workshop.

Kelly started her career with Avion Solutions. It was at Avion that shot peening became more than a paragraph in a book. When she joined Avion, the company was in their final phases of a Small Business Innovative Research (SBIR) project with the U.S. Army. The project studied Ultrasonic Shot Peening (USP) as a repair procedure for military helicopters and fixed-wing aviation. Shot peening became one of Kelly’s biggest projects with Avion. She also conducted research on mini-Almen strips that led to her position as a PhD candidate at the Clausthal University of Technology in Germany. Kelly’s PhD

dissertation focuses on the further qualification of Ultrasonic Shot Peening on aerospace-grade materials. She will present a paper on this topic at the 14th International Conference on Shot Peening (ICSP-14).

Kelly’s paper for ICSP-14 will not be her first research paper. She has co-authored nine papers on USP research for aircraft. She presented a paper titled “Mini-Almen Strips: A Promising New Technology” at the 2013 U.S. Shot Peening and Blast Cleaning Workshop.

Keeping the name of the award’s recipient a secret is always a challenge but *The Shot Peener* staff managed it again this year. It wasn’t until Jack Champaigne, during his opening remarks, spent a lot of time sharing her profile as an instructor that Kelly realized she had won. “I am beyond thrilled to have won this award and appreciate the acknowledgement of my dedication to the shot peening industry. It is an honor to be only the second female and youngest winner of this award,” Kelly said.

We look forward to many more accomplishments from Kelly. ●

A complete list of “The Shot Peener of the Year” award recipients is available at www.theshotpeenermagazine.com.