

Upon graduation from the MMP program, Jim took a permanent position as a Welding Engineer in the Manufacturing Technology Laboratory (MTL) within GEAE's Engineering Division. During this assignment, he gained process development and statistical experimentation experience by developing inertia welding processes. His next position was as a Staff Engineer in the Metalworking section of MTL. Here Jim developed his shot peening expertise by developing new peening processes, analytical tools, and equipment of peen critical aircraft engine components. He was instrumental in introducing NC peening to GEAE's production division. In addition to his peening responsibilities, Jim also introduced GEAE to Abrasive Waterjet (AWJ) Machining by developing several production processes and by specifying and installing a complete 5 axis AWJ machining center. During these assignments, Jim also received a M.S.M.E. from the University of Cincinnati.

Recently, Jim left GEAE and took a position at Progressive Technologies in Grand Rapids, Michigan, as Manager of Process Engineering. In his new position, Jim will further develop and enhance Progressive's process experience to aid in the design and build of precision peening, blasting, and waterjet machine tools.

Bob Thompson received a B.S.M.E. from Bucknell University in 1960, a M.S.M.E. from Rensselaer Polytechnic Institute in 1962, and a Ph.D. from the University of Rochester in 1966. He joined the Research and Development Center of General Electric in the fall of the same year where he is still employed.

His first assignment at GE involved developing sensors and controls for metal cutting and grinding. Next, he was involved with the power generation business where he developed equipment to harden the erosion shields of large steam turbine buckets, developed and applied new methods to measure through wall residual stress in nuclear reactor piping and assembled math models to predict the pressing behavior of nuclear fuel powder with the aim of reducing fuel rod failures. The period around 1980 was spent devising new, improved ways to manufacture Lucalox and tungsten filament lamps. Since 1987, his research has had the goal of building a scientific base for shot peening, a manufacturing process which has been largely empirical. This led to math models for intensity and coverage based on process parameters like shot flow rate, stream distribution, velocity, etc. The research led to magnetic shot velocity sensors, new ways to set up and control the process, and NDE evaluation techniques for peened surfaces.

Bob became a Fellow of the A.S.M.E. in 1988 and in 1980 received the Blackall Machine Tool and Gage Award of A.S.M.E. for his studies of grinding stability. ○

From the Desk of Jack Champaigne

Atta-Boy Department

One atta-boy to **John Pokorski**, Wheelabrator. John called me before going to see one of his customers that had trouble with our MagnaValves. When John called me from the job site I asked if he had access to an electrician or technician. Unfortunately, his answer was no. Unfortunately, I said, "Oh-noo." Apparently, John took that as a challenge. He found, all on his own, a pinched wire out at the MagnaValve. What a salesman. John—you're ok.

One atta-boy to **Mike Wern**, Engineered Abrasives. Mike has used our MagnaValves for almost ten years. During a recent run-off for General Electric, our engineer, Mark Ingram, showed a prototype of our next generation controller to Mike. His reaction was positive until he saw how to set the alarm band. Then he went ballistic. (Sorry Mark. I should have warned you.) Anyhow—Mark decided to incorporate Mike's suggestion into the production version of the model AC controller. Thanks Mike.

SAE FD&E Committee Meeting

The next meeting of SAE FD&E Committee will be on October 4-5 in Detroit, Michigan. If you are interested in learning more about the Surface Enhancement Sub-committee of the Fatigue Design and Evaluation Committee, make sure that you read the SAE Surface Enhancement Division article on page 25 of *The Shot Peener*, or contact chairman Charlie Barrett at (908)972-1562.

All you need to know about shot peening is 1-800-832-5653

That's what we advertise in *The Shot Peener*. But—what do you suppose I do when I get a hard question about shot? I usually call Bob Gillespie at Premier Shot, or for the really hard questions, Dave Hale at Ervin Industries. Dave was casting shot before iron was an element. Gottcha Dave. (Dave - I warned you. I asked you to write something for the Memories Column and you didn't do it. Charlie Barrett listens. But Dave doesn't.) ○

We're Growing

The Shot Peener continues to grow. We recently contracted with KL Advertising Services to handle all of our advertising layout and design. Kathy Levy, President of KL Advertising, will be contacting all of our advertisers for insertion orders. She also will be offering contract services for ad creation and copy writing.

It was Kathy's efforts that enabled us to offer the 4-color printing. We look forward to many more improvements. Welcome aboard, Kathy. ○

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