## When shot peening practices go bad

## History proves that there are severe consequences for poor shot peening practices in the aerospace industry.

In the spring of 1992, three men were sentenced to jail time in a bad-parts case. The case, involving three brothers who ran a family business, St. Charles Metal Finishing Co. in St. Louis, Missouri, set off tremors in the passenger aircraft industry when companies learned that their planes might be flying on untested parts. St. Charles Metal Finishing provided shot peening, blast cleaning and structural testing services to the aerospace industry. The three executives falsified inspection reports for parts used on 1,000 fighter planes built by McDonnell Douglas Corp.

The Department of Defense refused for a time to accept delivery of McDonnell's planes and missiles, worth billions of dollars.

Rodger Parker, 45 and a vice president of St. Charles Metal Finishing, was sentenced to 25 months in prison and fined \$12,500. Steven Q. Parker, 42 and a vice president of the company, was sentenced to 27 months in prison and fined \$12,500. Charles Parker, 31 and a supervisor at the company, was sentenced to nine months in prison.

"The activities these people engaged in deserved prison sentences," said Assistant U.S. Attorney James Martin.

Martin said the untested parts could have taken lives if an airplane crashed. He said the Parkers had made a profit of several million dollars by not testing the components properly. Each of the Parkers pleaded guilty to making false declarations on a defense contract, a felony.

St. Charles Metal Finishing, 1300 Olive Street, was founded in 1966 by Quince Parker, father of the defendants. He was in semi-retirement in 1992 and was not charged in the case.

The case began after an employee at St. Charles Metal Finishing told McDonnell executives that the metal company was not properly testing aircraft parts but was certifying that they had been examined.

For years, the company had tested structural components for McDonnell and other airplane makers, looking for cracks and other defects. They also tested missile parts. Eventually, the FBI, the Defense Criminal Investigative Service and the Naval Investigative Service learned that the company had failed to test parts on occasions dating to 1987.

In some cases, no qualified technicians were on hand to test the components. In other instances, the company skipped the tests to save money. The parts included structural items essential to air safety. It remains unclear if St. Charles Metal Finishing properly shot peened the components but they did not maintain appropriate records of the process.

Investigators inspected parts at McDonnell's plant here and found cracked wing components. The components had been certified as tested at St. Charles Metal Finishing.

The Pentagon refused to accept McDonnell's aircraft for a time. Military officials said they feared the planes might wear out prematurely. The affected planes included the Air Force's premier fighter, the F-15 Eagle, the Navy's F/A-18 Hornet strike fighter and the Marines AV-8B Harrier II jump jet. The company's Harpoon and Stand-off Land-attack missiles were also briefly refused.

The assets of St. Charles Metal Finishing were transferred to another company as part of a settlement of lawsuits and the company went out of business.

Source: St. Louis Post-Dispatch