## INTEGRATED DEFENSE SYSTEMS



## Paint shop is ON a roll

An improvement idea spreads to other sites —and supports Lean+

## By Katherine Sopranos

When a Boeing St. Louis paint shop team rolled out an idea, it dramatically changed how a defense aircraft is painted. It also introduced improved methods to other Integrated Defense Systems locations.

The IDS St. Louis Paint Shop applies aircraft- and customer-specific marks such as squadron logos, insignias or warning stripes on aircraft such as an F/A-18 or F-15. In the past, for one aircraft this marking process took many days for prep work and paint. Several years ago, the team studied and tested ways to improve the process, and then successfully incorporated better, more efficient techniques that shaved production time.

"This team took the initiative to work together and make a difference," said Steve Jacques, IDS vice president of Manufacturing. "They've improved their processes and shortened cycle times, plus they've reduced costs and inventory. Because of their Lean efforts over the years, we have a much stronger process that benefits both IDS and our customers."

Previously, the marking process involved hours of preparation that included hand-measuring plane components and using metal templates. Similarly to painting a room in a house, areas of the aircraft were masked off and a paper or plastic covering was placed over the aircraft to avoid paint overspray. While the paint was applied, other painters would have to stop work because their areas on the aircraft were no longer accessible. They also would have to leave the room to avoid flyaway paint. During final paint, F/A-18 engine cavity heat release screens are protected from paint overspray. Dennis Green, Boeing St. Louis spray painter, is roller applying paint to match the surrounding area.

Now, most markings are created via computer, and work flow is no longer interrupted. Teamed with the St. Louis Sign Shop, the paint shop uses a Gerber Technology system that cuts the markers out of a high-tech maskant (sticker), including built-in "locators." These locators match up with physical features of the airplane, and position the markings precisely, without the need for metal templates. Once the maskants are applied, the paint is simply rolled on.

"When I first heard of this new method, I thought it was silly," said Jerry Maguire, an IDS spray painter. "But after trying it, it's great. I've been happily using it ever since."

"The roller technique reduced the time to lay out markings from two days to one," said Stan Bozarth, IDS Paint Shop final paint manager. Also, the team cut costs by reducing wasted paint from overspray and the number of consumables used.

Dwight Singleton, IDS Paint Shop process control engineer, has worked in the St. Louis paint shop for 32 years and attests to the positive change. "Everyone in the paint shop has progressed along with technology and change and embraced it," he said. "When a new method comes along, it's always questioned, but we have this 'let's try it' attitude. When it works, then it becomes a way of life."

Bozarth and Singleton have been traveling to other IDS sites to teach employees the improved techniques. What started as the brainpower of the St. Louis paint shop team now is the IDS business standard. Indeed, sharing a process improvement idea with other sites across Boeing supports the companywide Lean+ growth and productivity initiative.

"The simplest solution is oftentimes the best solution," Bozarth said. "Trust your colleagues and their ideas." ■

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