Pride in quality at Milpower Source

Written by Tom Caldwell

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BELMONT — Employees at Milpower Source, a military supplier, are proud of the quality of their work, knowing that lives depend on their products.
Marketing Manager Sam Young said a representative of the Missile Defense Agency in the US Department of Defense put it this way during a visit to the Belmont manufacturing plant: “What you do matters, because we get one shot.”
Long-time employee Ron Brooks said, “We’re not making toasters. When he flips that switch, it better work.”
Milpower Source makes the power conversion products used in such military applications as the Patriot Missile program, the Boeing E-3 Sentry (commonly known as AWACS, or Airborne Warning and Control System), and the new aircraft carrier Gerald R. Ford, the first of its class, which was delivered to the U.S. Navy on May 31.
Having established a reputation for the quality of its work over its first 30 years, Milpower Source has been acquired by an investment group that is seeking to grow the company even more, according to Young.
Milpower Source opened with a handful of workers in 1984, and Brooks was among them. When the company launched in the basement of National Power Products on Dearborn Street, there was a plant manager and five production people, Brooks said. The company doubled its space when it moved into a new building across the street from its current location, and expanded again when it came to 7 Field Lane. Today there are 54 employees, five of them — including Young and Human Resources Director Holly Lewis — coming in the last two years.
“We’re actively searching for more workers in the Lakes Region and beyond,” said Lewis. “We really encourage kiddos to come here and learn and grow, with full-time work and an excellent benefits package.”
She said the company has partnered with the J. Oliva Huot Technical Center in Laconia to offer student internships and opportunities for hands-on training. Working with Huot instructor Ken Martin, Milpower Source was able to hire two students right out of high school for full-time positions, she said.
Like many employers in New Hampshire, Lewis said Milpower Source is finding it difficult to hire the skilled workers it needs, and is looking at such partnerships to let young people know about the well-paying careers that are available to them.
The company also works with the University of New Hampshire to hire engineers, and has established relationships with the NH Technical Institute in Concord and Lakes Region Community College in Laconia “to get people excited about what we do,” Lewis said.
Once they have joined the company, people tend to stay, as evidenced by the number of people who have been with Milpower Source for 25 and 30 years.
“Over 40 percent of our workers have been here 15 years or longer,” Lewis said.
While most of the company’s work involves military applications, it also manufactures parts for commercial generators and hydraulic arms. The military work requires a high-quality product that is reflected in every piece the company produces, exceeding anything that is commercially available. Even among the company’s peers with military contracts, Young said, “We feel our work is better.”
Military specifications are complex, listing power and weight requirements, as well as the heat ranges that the equipment may be subjected to. Those specifications include every screw and fastener, so if something goes wrong, it can be traced back, said Young.
“Every ounce in the F22 Raptor has to be scrutinized for weight,” Young said, adding that most parts utilize aluminum to keep the weight down. Parts produced may range from 5 ounces to hundreds of pounds, but the weight is always factored in, especially for airborne applications.
The equipment produced at Milpower Source makes its way to every branch of the military, including the Trophy Active Protection System, M119A3 and M150/151 Fire Control, the Surface Electronic Warfare Improvement System, the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (spy balloon), AN/TPY-2 Ground Radar, the Norwegian Advanced Surface-to-Air Missile System (NASAMS), the Falcon Edge Integrated Electronic Warfare Suite, the Northrop Grumman E-8 Joint Surveillance Target Attack Radar System, and the E-7A Wedgetail, among others.

“We know what the end product is, and somebody is absolutely counting on it,” Young said.

As a result, quality control is extremely important. “We do everything can during testing to be sure that, if it fails, it fails here,” Brooks said as he examined a tiny power converter that was going through thermo-shock: subjecting it to temperature fluctuations from 125C to -55C. It goes into each chamber 14 times to make sure it continues working at those extremes, which exceeds the variations it would be subjected to in actual military use.

The part also goes into a vibration machine to subject it to a variety of sound frequencies. It gets tested after each stage in the process, he said. Once it has passed all those tests, it is coated to protect it against humidity, chemicals, and other environmental factors.

“These are very ruggedized units,” he said.

Young said the workers take a “highly specific, hand-crafted” approach, assembling and testing the product from start to finish, rather than using an assembly-line approach. The company purchases the circuit boards and other basic parts, but wires and assembles them by hand.

Young noted that they work with other local companies as much as possible when procuring parts. While Milpower Source has some contracts with Canadian and other international clients, 95 percent of the work is U.S.-based, Young said, and most of it is repeat business. The company has a couple of regional sales managers who seek new contracts, but Young noted that military work has a long cycle. Once they place a bid, they have to wait for approval, then for Congressional funding, and finally for a procurement order. The process can take six or more years.

“That’s why it takes exceptional trust,” Young said. “The engineers who have used our products want to come back to us. It’s the most reputation-based business in the defense community.”

That’s why Brooks has remained there for 32 years. “I’m very proud,” he said. “We know it’s important, what we do.”
An assortment of the products Milpower Source produces, most of them for military applications. (Tom Caldwell/Laconia Daily Sun)

Bob Lajeunesse, who does technical repairs and testing at Milpower Source, works on a power converter at the Belmont plant. (Tom Caldwell/Laconia Daily Sun)