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Mission possible

Concrete project keeps Kansas National Guard flying

hen it comes to serving one's state and nation, men and women in uniform know what it takes to protect lives and property. But civilian contractors working quietly behind the scenes often provide key pieces to enabling that service. Among those contributing to the nation's defense through their own skills are the employees of Pavers Inc., which recently took on a project to assist the Kansas National Guard's aviation division.

The Kansas National Guard was dealing with the rundown remnants of a World War II-era hangar apron, and Pavers, a concrete-work business, stood ready to accept the mission. In 1992, Pavers Inc. moved into municipal/highway contracting, and its skill set now includes concrete pavement, curb-and-gutter work and site work such as demolition, grading, treated bases and dirt subgrade. The company also performs a considerable amount of repair work, including pavement patching, dowel-bar retrofitting, partial-depth patching and joint sealing.

Repair work, along with an extensive amount of concrete work, is what brought Pavers to the Kansas National Guard project in Salina, Kan. The mission was to overhaul a 1,000-ft x 300-ft apron at Army Aviation Support Facility No. 2 that was not draining properly. Pavers needed to mill 6 in. of old asphalt and concrete and replace it with a fresh concrete overlay.

This was a mission in which the company is experienced, said Neal Saskowski, vice president of Pavers.

"Conservatively, we have done more than 100,000 sq yd of pavement patching in the last 15 years," he said.

On average, those jobs range from about 2,000 to 10,000 sq yd. That breaks down to 5,000 to 10,000 holes drilled for each project.

The Salina airport project for the National Guard had the company facing 2 ft of concrete and asphalt. The \$1.9 million project was bid in the fall of 2010, and work began in November.

The scope of the project meant sharing responsibilities with other contractors. One contractor did the milling for the top 6 in. of old concrete and asphalt that needed to come out, while another company was needed to install a 1-in. asphalt bond separation layer. A third major subcontractor provided traffic control, installing barriers around the work area and doing striping. Pavers focused on the drilling, doweling and concrete overlay.

With more than six decades and thousands of holes under its belt, the company has learned to "work smarter, not harder," relying on equipment that makes its jobs easier and more efficient. Among the equipment it uses regularly is a spread of concrete drills.

When Pavers started doing more highway patching jobs that involved drilling dowels into the edge of pavement, Saskowski said, it started exploring options. The company did some

up for our iil newsletter .roadsbridges.com research, but ultimately relied on what they saw working for others.

"One thing contractors do is we'll go out there and see what other contractors are using," he said. "Spending time on so many jobsites, it doesn't take long to notice when something is working really well. So if we see someone using something and it seems like it's working well for them, that's the best research we can do."

Their observations, as well as Saskowski's experience in the industry, led the crew to look into options from an Oklahoma-based company called E-Z Drill. For Pavers Inc., air compressors were already a standard piece of equipment on the jobsite. With E-Z Drill's fully pneumatic units, they merely needed to connect the air line and go. There were no concerns with maintaining hydraulic lines, since the drills maneuvered and operated easily on air power.

"Our fleet consists of three-gang, twogang and single-gang slab rider drills. We also have three of the Model 210 ongrade drills, a Model 65B [on-grade drill] for small patch work and the vertical attachment to turn a 210 on-grade unit into a vertical drill," Saskowski said.

Two of those slab rider drills helped speed along the Kansas National Guard project to its April 2011 finish date. When Pavers set to work with a crew of about 15-18 employees to reconstruct the apron for the Guard, it divided the 300,000-sq-ft tarmac area near the hangar into 18 16-ft-wide lanes, along with a few smaller areas. The company would need to drill more than 32,000 holes to complete the mission, with about 875 holes for each lane edge. Despite the big numbers, Saskowski said it was an average-size project for the company.

In just a day and a half, Pavers finished four 1,000-ft-long edges, a very high productivity rate, according to Saskowski. He credited the speed to hard work and the ease of using the drilling equipment. The equipment's reliability prevented any downtime in the process, which consisted of the crew pouring two lanes at a time, then coming back to drill the edges on both before moving to the next lanes.

"We were kind of tight on schedule because we really didn't start doing the concrete work until February," Saskowski said. "That was the final portion of the job, and so we were getting a bit pressed for time."

Pavers employed the E-Z Drill Model 210B-2 SRA, a two-gang slab rider drill, and the Model 210B-3 SRA, a three-gang version, to drill the thousands of 7/s-in.-diam., 18-in.-deep holes needed for the project. Once Pavers had each lane's holes drilled, they epoxied the dowels into place and finished off the lane with fresh concrete to complete the job.

Having the right equipment and experience had Pavers Inc. completing the project in time and getting the Kansas Guard fully operational again. Now the space is used for 10 helicopter pads for the Kansas Army National Guard's UH-60 Black Hawk helicopters. A thicker concrete area allows heavier transport plane's. R&B

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