This is Kansas Profile. I'm Ron Wilson, director of the Huck Boyd National Institute for Rural Development at Kansas State University.

A major road construction project is underway in North Africa. An industrial sweeper is being used to prepare the road surface for the application of asphalt. Where do you suppose that sweeper was built? Would you believe, halfway around the globe in Kansas? Today we'll learn about a remarkable ruralpreneur and his company which is building these sweeper machines for markets across the nation and beyond. It's today's Kansas Profile.

Alan Vance is CEO of Broce Broom, the company which produces these industrial sweepers. Mark Chalfant is Chief Operating Officer.

The history of this company goes back to Alan's grandfather, Ray Broce, who was born in 1902 in the rural community of Attica, population 626 people. Now, that's rural.

Mr. Broce worked for the Kansas Highway Department and then went into business for himself in Dodge City. “He mortgaged his home and bought his first piece of construction equipment in 1937,” Alan Vance said.

Ray Broce grew the Broce Construction Company into one of the leading road construction businesses of its era. Broce became the largest road construction company in Kansas and Oklahoma. “Someone estimated that half the roads in Oklahoma were built by Broce Construction,” Alan said.

From 1973 to 1975, the National Asphalt Paving Association presented its highest award for construction projects to Broce Construction – the only company in history to win the award three years in a row. Gee, they should retire the trophy...

In the road construction process, a roadbed base is built and then swept clean immediately before adhesive and asphalt is applied. It’s important that the road surface be just right.

Of course, the process of building roads and applying asphalt is typically done in the summertime. Winter is downtime. During the winter of 1961, Ray Broce and his mechanics had time in the shop to think about how to improve their road construction process. At that time, a road sweeper was usually towed behind a truck or tractor. That made it difficult to simultaneously steer and adjust the equipment.

The question arose: “Wouldn’t the broom work better if we put it in the middle of the machine where the operator could see it and make adjustments?” The guys went to a salvage yard, got an automobile frame and engine, and mounted the industrial sweeper broom in the center of the machine.

That was the beginning of the self-propelled mid-mount sweeper which would revolutionize that part of the industry. Broce Construction crews used it that summer. It worked so well that other contractors saw it and wanted one also. In 1963, Ray Broce formed a new company, Broce Manufacturing, to build and sell “Broce Brooms.” Eventually the family closed the construction business to focus on manufacturing.
Ray Broce’s daughter went to K-State and later met and married Bud Vance. Bud was an Air Force pilot. When he eventually retired from the Air Force, he joined his father-in-law’s company. They had a son named Alan who served as an overseas missionary before taking the position as company CEO.

Broce Broom now manufactures a heavy duty model for road construction and a lighter weight model for rental companies, while continuing to innovate with its partners. “People are now using our sweepers in the artificial turf industry as the final step in leveling the crumb rubber which has been poured on the artificial turf,” Alan said.

In 2018, the company partnered with another business to offer a new dust control additive to go in the sweeper water tank. “We want our operators to have the safest experience possible,” Alan said.

Broce Broom in Dodge City now has 60 employees. “We have shipped our products coast to coast and exported to 40 different countries,” Alan said. “We continue to sell more sweepers than all our competitors combined.”

For more information, see www.brocebroom.com.

It’s time to leave North Africa, where a sweeper from a company in rural Kansas is being used to prepare the roadbed. We commend Alan Vance, Mark Chalfant, and all those involved with Broce Broom for making a difference with engineering innovation. When a Kansas company can have global impact, that is a clean sweep.

For the Huck Boyd National Institute for Rural Development, this is Ron Wilson with Kansas Profile.