Jean Harrison, Kim Ringwald – H & R viZion

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

In the hurricane's aftermath, workers race to help stranded victims. They are aided by drones which fly overhead and capture images which direct the rescuers to the people who need them. If only there was a practical way to keep multiple drones powered and in the air. That vision inspired two entrepreneurs who are building such a system in the middle of Kansas. It's today's Kansas Profile.

Jean Harrison and Kim Ringwald are the founders of H & R viZion in Great Bend. They were inspired by the notion of what drones – sometimes called unmanned aerial vehicles - could do.

Jean grew up in Stafford County, married a farmer, and worked in Great Bend after he passed. Kim grew up in a Navy family. When her dad went overseas, she and her mom stayed at her grandparents' farm near the rural community of Bison, Kansas, population 255 people. Now, that's rural.

Eventually Kim's family settled at Ellinwood. Kim married and later moved to Great Bend where she met Jean. They worked at the same business and became longtime friends. Now both are retired.

"I was at home watching what was happening with Hurricane Harvey," Kim said. In 2017, Hurricane Harvey caused \$125 billion in damages and multiple fatalities. Kim saw a rescue worker struggling to unload a drone and other equipment at the disaster site. "Helicopters were trying to rescue flood victims by lowering baskets to them, but it took hours to find the victims," Kim said.

Kim thought to herself that there had to be a better way to power and deploy drones to help this situation. She sat down at a tv tray and started drawing designs, one after another. "I took the idea to Jean, and she said, 'I think this will work," Kim said.

After lots of research, the two women formed an LLC to develop and commercialize this concept. Using the initials of their last names and an eye-catching version of the word vision, they named it H & R viZion - spelled with a Z. "Catch the viZion" is a company motto.

Essentially, the business is finalizing development of portable drone charging stations which help to keep multiple unmanned aerial vehicles in the air. "Presently drones can only fly 30 to 35 minutes," Jean said. Their onsite charging station could service multiple drones and allow a fleet of drones to be kept in the air 24-7. Jean and Kim are now seeking investors to help grow their company.

What are the possible applications of such technology? "We're a couple of farm girls," Jean said. "At first, we thought about agriculture." She remembered a bad winter storm when a friend's cattle were scattered and drones could have helped locate them. Drones would also be helpful in finding and checking cows which might be calving and need assistance.

Other possibilities are virtually endless. In the case of an aforementioned natural disaster, drones can provide the aerial view to safely and quickly find victims and identify problems. It's safer to have a drone check a damaged roof than ask a person to go up on the roof, for example. Drones could be used for surveillance, inspection, construction, transportation, insurance, law enforcement, and national defense purposes also.

In October 2017, the Kansas Small Business Development Center hosted an event called Encountering Innovation where innovative small businesses could present their concepts to representatives of potential federal customers, primarily the Department of Defense. H&R viZion made a presentation at that session. "We have moved to high tech materials for our final models," Jean said. "With the round of investments we're currently raising, we will then be ready to manufacture our product and make our dream a reality," she said.

Another round of Encountering Innovation will be held in October 2018 in Johnson County. For information on that session, see www.encounteringinnovation.com.

Whether assisting with natural disasters, aiding homeland security, inspecting bridges or helping with business applications, aerial views can be extremely important. We commend Jean Harrison and Kim Ringwald for making a difference with innovative technology. It is helpful to catch the viZion from above.

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