

John Martens – NMotion UAS

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

The fire is raging through the building as the firefighters hurry to the scene. They need to identify the location of the fire and determine the safest and most efficient tactics for dealing with it. If only they had a quick, practical way to get an aerial view of the building...That is the thought process which led a Kansas entrepreneur to create an innovative new business using unmanned aerial systems to enhance public safety. It's today's Kansas Profile.

John Martens is the founder of NMotion UAS, the company which is doing pioneering work with unmanned aerial systems and technologies. John grew up at Hesston and went to K-State. He became a firefighter in Manhattan and then moved back to get closer to family.

John still works as a firefighter. His wife is also from Hesston and teaches financial planning at K-State-Salina. On the side, John started working in digital media, including video production. In order to get aerial views, he began using unmanned aerial vehicles – sometimes referred to as drones – for filming video.

Then commercial uses of these drones were blocked by the FAA as the agency developed drone regulations. John was frustrated, but as he looked into the matter, he found that the use of drones for public safety purposes was still permitted through an authorization process. As a firefighter, he immediately recognized the benefit of using unmanned aerial systems to help at a fire scene or other emergency by using a piece of remote-controlled equipment for recon instead of a human.

John created a business called NMotion UAS, which produces unmanned aerial systems for first responders and other public safety agencies. These are easy-to-launch unmanned vehicles with cameras or sensors that public safety officials can use to help respond to an emergency situation.

There are numerous applications of these systems for public safety, such as for firefighters, search and rescue operations, law enforcement, emergency management, hazmat situations, or remote sensing. The systems can provide emergency personnel a real-time aerial view and even thermal imaging of a disaster scene such as a fire or flood.

Unlike manned systems, the unmanned robots can fly very close to a hazardous location without harm. Information can be instantly transmitted back to firefighters, law enforcement, or rescuers to assist with their operations on-scene.

As the company motto says, this allows public safety officials to “See more. Risk less, and save lives.”

The flying cameras themselves are small, remotely guided flying devices. The real benefit of these systems comes from the perspective and data which these planes can provide.

“We offer ready-to-fly turnkey systems to public safety officials and first responders,” John said. “Our systems allow us to revolutionize the dull, dirty, dangerous tasks that responders face regularly.”

John knows those tasks firsthand. “I've been a firefighter for seven years,” John said. “It's a rewarding and challenging job. Our systems are like a force multiplier,” he

said. “They enable emergency responders to better calculate risk and mitigate the emergency more efficiently.”

John started building this equipment in his basement. The company’s main office continues in John’s hometown of Hesston, population 3,531 people. Now, that’s rural.

NMotion UAS was selected by the Center for Entrepreneurship in the K-State College of Business as one of ten up-and-coming businesses to be part of the inaugural class of its Launch A Business program, or L-A-B, in 2014. “It was a great opportunity,” John said. “It was perfect for what we needed and what many startup companies need.” Applicants are now being sought for 2015. More information can be found at www.k-state.edu/lab.

John Martens has since been featured in UAS Magazine and selected for the prestigious Pipeline Entrepreneurship Program. More information on his business can be found at www.nmotionuas.com.

The fire is raging through the building as firefighters arrive to assess the situation. If only they had a way to get a quick, aerial perspective on the emergency...and now they do. We commend John Martens of NMotion UAS for making a difference with innovative use of technology for public safety. They can’t fight fire with fire, but maybe they can “fight fire with a flyer.”

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